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THE

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OF

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THE
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SEPTEMBER, 1872.

No. 1.

Original Communications.

CASE OF ANTE-LARYNGEAL ABSCESS.

BY F. R. L. STRATHY, M.D., L.R.C.S., EDIN., RESIDENT PHYSICIAN,
ROYAL HOSPITAL FOR SICK CHILDREN, EDINBURGH.

HISTORY OF THE CASE—Ann Maria L——, æt. 18 months, still upon the breast, and dentition present. Recovered from a mild attack of genuine small-pox four or five weeks ago, having at the same time an attack of whooping-cough, from which she had also recovered. Present illness began two weeks ago, with a renewal of a cough, together with dyspnœa and a “heaving of the chest.” Poultices were applied to the chest by the mother, which apparently relieved the child for a day or two. “Lumps” began about this time to form just below each ear, and, as the mother stated, “gradually fell down the neck till they met in front (the *post-mortem* examination showed that these were not glandular swellings) over the upper portion of the larynx, and continued to become enlarged, and the respiration more difficult. The child gradually lost her voice, the first symptoms of it beginning with the appearance of the “lumps.” She coughed with difficulty, but still the sound was not croupy in

character. Deglutition was difficult, yet she was greedy for food. She expectorated a great deal of mucus for last five or six days. She was brought to the hospital on the 22nd of June, and was found to be in the following condition.

PRESENT CONDITION.—Very much emaciated ; breast “pigeon-shaped ;” great dysnœa present ; the breathing abdominal and accompanied by a sort of snoring sound. The cough was not the pathognomonic cough of croup, but was peculiar and difficult to be described. When the recumbent posture was assumed, a threatening of immediate suffocation took place. The following symptoms also presented themselves, viz. : a remarkable stiffness of the neck, and retraction with immobility of the head ; symptoms which are noticeable in many cases of retro-pharyngeal abscess. On examination of the throat no croupal patches could be observed. Externally over the upper portion of the larynx, and in front of it, there was a swelling, which was apparently not connected with the larynx, and was quite movable when manipulated, but was pressing upon it so as to interfere with respiration. The child appeared most at ease when in the sitting posture with the head pretty well up, supported by pillows.

TREATMENT.—The child was made to breathe an atmosphere containing steam, and emetic doses of sulphate of copper, administered with no more effect than to produce nausea. Pulse about 130 and rather weak. Dr. Stephenson visited the hospital at 8 p.m. and diagnosed this “lump” to be an abscess, and accordingly opened it with a fine trocar and canula, when pus was evacuated to a slight extent. He then made an incision with a bistoury, and used pressure, and about half an ounce of pus was discharged, there being no more apparently present. This was followed by great relief of the dyspnœa, but still the respiration did not assume its normal character, and there was yet the peculiar cough.

Ordered an injection of brandy (3 iv.) and beef-tea ; also sherry, whey, and a mixture containing

R. Ammon : Carb. grs. xxiv.

Infusi cinchonae ʒ iii.—M.

Sig. : A dessert-spoonful to be given every two hours.

Milk was also given *ad libitum*. Hot moist sponges were constantly applied to the neck in front. About 12 p.m. I saw the patient, and she was then breathing pretty freely, but still the peculiar snorting sound was present.

June 23rd.—Patient appears easier this morning, and the breathing is not so difficult as last night. Pulse 120. I left the hospital for a couple of hours, and was told by the nurse when I returned, that the patient had had a convulsion about 11.30 a.m. In the afternoon the child was almost ravenous for food, and drank a considerable quantity of milk, and took the brandy—four ounces every twenty-four hours, having been ordered in addition to the sherry whey. She seemed to progress favorably till about 10 p.m., when she had three more convulsions, accompanied with great dyspnoea, but seemed to recover again. At midnight I again saw the patient. Respiration was more affected than it was this morning. The incision into the abscess was still open, and there was apparently no discharge to come away.

June 24th.—The child died this morning at 4 a.m. The nurse stated that after my visit last night, the child became weaker, and that a little while before death, sudden dyspnoea occurred, resulting in convulsions, during which the patient expired.

POST-MORTEM EXAMINATION.—This took place thirty-one hours after death. The orifice made into the abscess was very much contracted, and fluctuation was felt from a further accumulation of pus.

Tongue, larynx, and œsophagus were removed *en masse*. On slitting up the œsophagus, a considerable quantity of white, glairy mucus, non-viscid in character was seen, filling the posterior fauces. The epiglottis was swollen, clear, and œdematous looking. On slitting up the trachea and larynx, the upper part of the latter was filled with glairy mucus, otherwise these parts were normal. The abscess was situated immediately in front of the larynx, and beneath all the muscles; and extended from the upper border of the larynx, downwards for an inch and three quarters. The cavity of the abscess also ran in an oblique direction upwards on either side of the larynx, to the extent of about three-quarters of an inch or more, terminating on either side at the root of the epiglottis. Nothing croupal was found in any of the structures above mentioned.

I think we may justly conclude that the child died from Asphyxia, caused by a re-accumulation of pus, thereby causing pressure around the larynx and trachea, and lessening their circumference; and from the incision not having been sufficiently large to allow of the pus being evacuated freely, though at the time the incision was

made, and the following day, all pus that was present was pressed out. It is to be regretted that the incision was not made larger, and I would suggest that in similar cases the opening should be kept free by a large canula or piece of suitable tubing.

The mother's statement with regard to lumps having commenced under each ear, and gradually falling in the neck till they met in front, seems to correspond with the oblique direction of the abscess up each side of the larynx. It would appear that the pus had burrowed downwards by gravitation till both original abscesses met in front of the larynx. I think the great peculiarity of this case is, the fact of similar abscesses commencing simultaneously on each side. I believe an abscess in the above situation is of very rare occurrence; and, in a hasty search through what works I have at hand I can find no record of a similar case.

A SUCCESSFUL CASE OF PERINEAL SECTION FOR
THE RELIEF OF STRICTURE OF THE URETHRA,
PERFORMED IN THE KINGSTON GENERAL
HOSPITAL, ONT.

REPORTED BY M——D——.

This operation, the merits of which are so variously estimated by Surgeons, was performed by Dr. Maclean, at present of this city, on the 24th of last month. I was invited to witness the operation, and render such assistance as might be necessary.

The patient was the remnant of a hardy man, apparently about 50 years of age, whose worn appearance gave evidence of long, severe and constant suffering. He had been the subject of gonorrhoeal stricture for a long time, and for the last four years has suffered from a urinary fistula, which opened externally just posteriorly to the scrotum, and through which nearly all the urine passed. The fistula was connected with several sinuses which burrowed in the cellular tissue of the perinæum, and from which pus continually exuded. The scrotum was enlarged by congestion of its tissues, highly inflamed at its posterior part, and seemed as if it would ere long give way to the destructive ulceration, to which, unrelieved, it was eventually doomed. Dr. Maclean had on several

occasions, attempted to relieve or cure the urethral contraction by gradual dilatation; but so unyielding was the interstitial deposit thrown out around the diseased part, and, withal, so excessive was the irritability of the urethra—severe rigors and fever following every attempt to introduce an instrument—that the Dr. deemed it better practice to abandon this procedure, and seek for permanent relief, by external incision.

The patient was brought to the Hospital for the double purpose of greater convenience and better attendance, and for a few days previous to the operation his system was brought into as favorable a condition as possible.

On the day above stated the operation was proceeded with. The patient being perfectly anæsthetized, and placed in the proper position—that is, as for lithotomy—it was found that neither a Syme's staff, nor even the smallest bougie, could be made to penetrate the stricture. It became necessary, therefore, to resort to "the operation without a staff," which is known as the "boutonnière operation." For this purpose a full-sized catheter was introduced into the urethra as far as possible, that the point might serve as a guide by which to find the urethral opening; down upon this, section was made, and continued backwards for a short distance in the mesial line, that an opportunity might be given to effect an entrance into the urethra.

By patient perseverance and dexterous management, a grooved director was then passed through the wound in the urethra, backwards towards the bladder, and upon this the stricture was divided, till the large catheter which had been passed through the penis, and brought out at the external wound could also be passed into the bladder. The discharge of a quantity of urine declared the entrance of the instrument, and gave assurance that the work was accomplished. The catheter was fastened in position by tapes, in the usual manner, and the wound left to heal by granulation. There had been no bleeding of any account, and consequently the dressing was of the simplest form.

The catheter was allowed to remain in the bladder for forty-eight hours, at the end of which time it was removed, and passed afterwards only at intervals of two or three days. Very little difficulty has attended its subsequent introduction, and the chief suffering which has been complained of by the patient was a pain in the right

spermatic cord, and right testicle, with swelling and tenderness of the latter, the result I think of rather too frequent catheterization.

Yesterday in company with Dr. Maclean, I visited the Hospital, and found the patient very comfortable; he had been moving about the ward for the last ten days, the wound was nearly healed, most of the urine passed per *viam naturalem*, a No. 10 catheter was easily introduced into the bladder, and the patient stated that he could void his urine quite well, and that the flow was fully under his control; he was also relieved of the annoying prolapsus ani which he had suffered previously during the voidance of both urine and fæces.

In short, the indications were decided, that a satisfactory and radical cure of the stricture, and its accompanying evils, is in progress, and that ere long, the relieved patient will have cause to bless Dr. Maclean, the Kingston advocate, of Syme's operation for stricture.

This is the first time, I think, that this operation has been performed in Kingston, although it has been done many times in various parts of America during the last 50 years, and about 200 times by Syme of Edinburgh alone. Dr. Maclean was a pupil of Syme, and is the Editor of the American Edition of his Surgery, consequently he is an ultra defender of Syme's theories and practices, and ventures boldly upon every operation recommended by that distinguished surgeon.

Dr. Maclean has practiced his profession with general satisfaction for a number of years in this city, and he will of course be greatly missed by his friends in this vicinity (and foes also) when he leaves for Ann Arbor, Mich., where he will shortly proceed, to fill the Chair of Surgery in the Medical School of that place.

We predict for him, however, a brilliant career in his new and extended field of labor, and feel assured that his peculiar abilities will achieve for him a distinguished record in the annals of American Surgery.

THREE CASES OF DOUBLE OVARIOTOMY.—Dr. T. Gaillard Thomas, of New York, reports in the *American Practitioner* for July, three cases of double ovariectomy performed by him in the Strangers' Hospital of that city, all with successful results. One of the operations required an hour and thirty minutes. The patients were all etherized, and in the subsequent treatment were kept more or less under the influence of morphia injected hypodermically.

ON PRIMARY AND SECONDARY AMPUTATIONS IN GUN-SHOT WOUNDS.

COMPILED FROM "SURGICAL NOTES" TAKEN ON THE FIELD BY
R. R. STEVENSON, M.D., FORMERLY SURGEON IN THE ARMY
OF THE "CONFEDERATE STATES OF AMERICA."

Case 225—D. H. æt. 24, Priv. Co. D., 6th Reg't., Ky. vol's, Infantry—Right arm shot off by cannon-ball, in battle of Shiloh, April 6th, 1862. On examination I found the shaft of the bone carried away, leaving nothing but the head and upper end of the humerus. In ten hours after he received the injury, reaction was established and chloroform administered. I amputated at the shoulder joint. After the operation he reacted well under the use of stimulants, and I sent him to the "General Hospital" at Corinth, Miss., and notwithstanding the use of tonics, stimulants and full diet, he died about the 10th day after the operation, of pyemic fever.

Case 562.—C. B., Private C. S. N., æt. 24.—Left fore arm shot off about five inches from elbow joint, by cannon-ball from Federal gun-boat, in battle with Confederate Ram, "Arkansas," at Vicksburg, July 1862, after the vessel landed near one of the shore batteries, immediately above the town. He was borne to a sheltered spot in a ravine, and upon examination I found the pulse feeble, skin cold and covered with a clammy perspiration. For a space of about four inches from the point at which the limb was severed, I noticed that the skin and integuments were very much blackened—apparently scorched, and presenting very much the appearance that I had noticed in soldiers who have been injured by the explosion of a shell. I thought at first he had been manning one of our shore batteries, and that the wound was caused by a fragment of shell from the enemy's mortar boats. I amputated without using chloroform, before recovery from the "shock," by the circular operation, at the lower end of the humerus. By the administration of grain doses of opium every eight hours, reaction was pretty fully established in the course of twenty-four hours. He was then sent to the General Hospital at Jackson, Miss. The treatment consisted in stimulants, full diet, and cold water dressing. He recovered in six weeks.

Case 631.—M. K., Private Co. B., 3rd Tenn. vol's, Infantry. æt 27.—Wounded in battle of Baton Rouge, La., Aug. 1862, in left thigh with grape shot, the ball entering about the middle third, shattering the femur and severing the nerve and artery. Amputation at upper third, two hours after injury, before recovering from shock, without the use of chloroform. After the operation I administered stimulants freely, and reaction was fully established in thirty-six hours. He was then removed to the Hospital at Magnolia. The treatment consisted in full diet with an occasional dose of quinine; water dressing with a weak solution of nitric acid. Recovery was complete in about eight weeks.

Case 720.—A. C., Lieut. Co. B., 4th Reg't. Ky. vol's. Inf'y. —Wounded in battle of Murfreesboro, Tenn., Dec. 30th, 1862, with minnie-ball, shattering lower third of femur, and severing nerve and artery. Twelve hours after the injury, and after reaction from the shock, had taken place, I administered chloroform, and Surgeon Scott amputated the thigh at the middle third. In twenty-four hours after the operation under the use of stimulants, he had reacted slightly. Shortly after this he commenced sinking, and died in thirty hours after the operation.

Case 1002.—A. K., æt. 30, Serg't. Co. 6th Re'gt. Ky. Inf't'y.—Wounded in battle of Murfreesboro, Dec. 31st, 1862.—Left foot and ankle joint carried away by a ricochetting ball from enemy's gun. Was borne back to a sheltered spot immediately in rear of line of battle. Upon examination I found the skin cold, pulse feeble, but slight hemorrhage from wound. I amputated about middle third of leg by circular operation—in about thirty minutes after injury before recovery from shock—without the use of chloroform. The wound was closed slightly by wire sutures, and a light bandage applied so as to permit the escape of pus and sanious matter,—half a grain of sulphate of morphia with an ounce of whiskey was administered, and he was sent to the Hospital. In six weeks from the day he lost his leg he visited the camp of his Regiment at Tallahoma. The treatment in Hospital consisted in cold water dressing with the occasional use of a solution of nitric acid, and full diet.

Case 115.—R. H., Brig. Gen., P. A. C. S. A.—Wounded in battle of Murfreesboro Jan. 2nd 1863, in knee joint by grape

shot—limb nearly severed—shock to the system very great—pulse feeble, skin cold, respiration feeble. Attempts to produce reaction from shock without effect. Amputation, lower third of femur, twelve hours after injury. Patient gradually sank, and died shortly after operation.

Case 1267.—G., Private Co. A., 5th Ky. Reg't., Infantry.—æ. 27.—Wounded in battle of Jackson, Miss., July 1863, by grape shot. Entrance, external surface, middle third of left femur, shattering the bone and severing the femoral artery and nerve—exit, internal surface—making frightful lacerated wound, into which three fingers could be thrust. A tourniquet having been applied by one of the infirmary corps, he was carried to a sheltered spot under the right bank of Pearl river, where amputation was performed at once without the administration of chloroform, and before recovery from shock. Two grains of opium with one ounce of whiskey was administered to him, with instructions to repeat the opium in four hours, if reaction was not established. In thirty-six hours after the operation he had pretty fully recovered from the shock, and was left at the field Hospital, near Pearl river. The Confederate forces being compelled to fall back, he was left within the enemy's lines, and under the kind care of Surgeon Hinkly, he recovered in eight weeks; and was paroled and sent to his command.

Case 1890.—F. B., Private Co. B., 3rd Reg't., Ky. vol. Infantry.—Right fore arm shot off by fragment of shell in charging Federal batteries at Chatanooga, Sep. 24th, 1863. On examination I found the pulse feeble, skin cold—general appearance showing symptoms of great prostration. I amputated the limb by the circular operation, at lower third of humerus, (the elbow joint being somewhat involved in the wound) before recovery from shock, and without the use of chloroform. The wound was closed with two sutures and covered with a light dressing. By the administration of one-fourth grain of sulphate of morphine and one ounce of whiskey, reaction was pretty fully established in the course of twenty-four hours. He was conveyed to the field Hospital, and the treatment consisted principally of cold water dressing, tonics and full diet—recovery in five weeks.

In reporting these cases, I attach no very great importance

to them—only that all the operations were primary and proved successful, (except three), the emergencies of the case requiring them to be performed at once—the knife almost following the shot. All military surgeons who have seen active service on the field, can testify that many operations have to be performed, under emergencies, that seldom or never occur in civil practice. The non-administration of chloroform in some cases was due to the fact that I was averse to the administration of an anæsthetic previous to full recovery from the shock, as the pulse, which is our principal guide in the administration of anæsthetics, is not, from the depressed condition of the sanguiferous, and nervous systems, following severe gun-shot wounds, in a fit condition to direct us in its use. I amputated in some cases by the circular operation, not from choice exactly, but because the instruments that I happened to have at the time were made exclusively for the circular operation. I may here remark that amongst the numerous cases that I have had, and that I have seen operated upon, my evidence is favorable to the circular operation in all cases where it is practicable. I will not pretend to say that it is the best mode of operating, but certainly less of the soft structures are exposed to the edge of the knife, by circular, than by the flap operation.

The question as to the period at which amputations from gun-shot wounds should be performed, has given rise to much discussion amongst surgeons. I believe that most modern writers on military surgery concede the fact, that where amputation is inevitable, that the best time to operate is after the shock to the system has subsided, the pulse regained its vigor, and the skin its natural warmth. Without pretending to question the judgment of older writers on military surgery, I can fully endorse the opinions of Larry, Guthrie and others, that primary operations are more successful than secondary ones, and that the sooner the operation is performed after the injury, the greater the chances for saving the life of our patient. Take a soldier, for example, whose hand and wrist have been mangled and crushed by a fragment of shell, we wait from two to three days for reaction or recovery from the shock—the brilliant eye, the intense pain, hot skin, and accelerated pulse all indicate that reaction has taken place. We now place him under the influence

of an anæsthetic, and amputate the limb; thus causing him to undergo another "shock," perhaps as great as the first, from which he has to rally a second time. It must be evident, then, that the sooner the operation is performed after the injury, the less will the nervous system be taxed to bring about a second reaction, as the inflammation arising from a clean incision is much less than that following an extensive, lacerated and contused wound. I have witnessed a great number of "secondary" operations that proved fatal, which I am confident could have been saved by primary operations, many of them performed by myself and others; not from choice however, but because it was impossible to operate upon them immediately after the injury. By primary operations, we may also avoid those fatal tetanic symptoms that sometimes follow reaction in gun-shot injuries.

In case 225 we see that death resulted, not as the immediate result of the operation, but from pyemic fever, a disease that carried off a large number of soldiers after the battle of Shiloh, caused principally by the defective Hospital accommodations, which were located in Corinth, Miss., a place proverbial for its unhealthy situation.

In case 1720,—“previous habits,” together with the great severity of the shock, occurring from the injury and the operation, were the principal causes of death. The same might be said of case (2115).

Selected Articles.

DR. MURCHISON ON BLOOD LETTING IN INFLAMMATION.

According to the manner in which the blood is drawn, blood-letting is said to be either *general* or *local*. Blood-letting, both general and local, was at one time the universal treatment for inflammation, but is now one of the rarest of surgical operations. An attempt has been made to account for this revolution in medical practice on the supposition that inflammations had changed their type; that formerly they were sthenic and required blood-letting, but that now they are asthenic and are injured by deple-

tion. This view of the matter is untenable; and I need only now repeat that in some parts of the world it is still the fashion to treat inflammations by copious blood letting, and that it is difficult to imagine how the type of inflammation could have changed in one country and not in another. There can be no doubt that much mischief was done in former days by copious general bleedings in inflammation. In order to diminish effectually the quantity of blood in the inflamed part through the general circulation, it is necessary to take such a quantity of blood that its quality becomes impoverished, while the heart's action is weakened and the reparative powers of the system are impaired. But the same objection does not apply to local bleedings. In many of the inflammations at or near the surface of the body which come under the notice of the surgeon, the effect of local bleeding in relieving pain, diminishing congestion, and otherwise moderating the intensity of the inflammatory process, is so immediate and marked that it is difficult to account for the modern antipathy to blood-letting in any form. It is argued that the loss of even a small quantity of blood weakens the entire system, and especially impairs the vitality of the inflamed part; but such statements have been chiefly advanced by writers who have had little or no experience of blood-letting themselves, and are, as I think, contrary to the evidence of our senses, while repeatedly you will have occasion to observe that a congestion of the brain or of the lungs is at once relieved by a natural hemorrhage—by a copious epistaxis or hæmoptysis. There is one important difference, however, as regards local bleeding, between an inflammation of some internal organ and one on the outer surface of the body. In the latter case there is no difficulty in understanding how local bleeding diminishes the quantity of blood in the inflamed part, but it is not so in the former. Yet, on calm consideration, you must see that it is not necessary for local depletion to act beneficially that it should do so through the general circulation. It may do so through the nearest arterial trunk, which is in common to the external surface and the inflamed organ. The intercostal artery can only transmit a certain amount of blood, and when the blood is made to flow from its superficial branches, less will go to the deeper branches. But whatever be the explanation, there can be no doubt of the clinical fact that the intensity of inflammation

may often be moderated by local blood-letting, and this, too, without any injury to the patient. In inflammations, for example, of the liver and intestines, I have repeatedly observed the most marked and immediate relief follow the application of leeches to the abdomen or around the anus. Still, you must not have recourse to blood-letting in every case of inflammation. It is only in the early stage of inflammation, or when it is advancing, that you can expect it to do good. You must also abstain from blood-letting in persons of debilitated constitution, or when the inflammation has been excited by an animal poison or some other morbid condition of the blood.—[*British Med. Journal.*]

THE TREATMENT OF CANCER BY ELECTROLYSIS.

At a meeting of the New York Pathological Society, reported in the *New York Medical Record*, January 2, 1872, Dr. Neftel presented sections of carcinomatous deposits removed post-mortem from a lady who had died in consequence of mammary cancer. About two years ago she noticed a hard and painful lump in her right mamma. This increased, and, with the pain, extended to the axilla. These masses were removed by operation. Soon after the operation she had an attack of pneumonia, from which she did not recover until the lapse of several months. In the meantime the wound cicatrized, but the pain still continued, and extended down the arm of that side, making it almost useless. After several months she felt that the cicatrix became indurated, and from these there seemed to be a string of smaller lumps, which aroused the suspicion in Dr. N.'s mind that the disease had translated itself to some internal organ; she then insisted on being treated by electrolysis, and the treatment was pursued, in conjunction with Dr. Bailey, of Albany. To the surprise of Dr. N., not only did the secondary tumors disappear, but the patient improved in general health. So marked was this latter effect that Dr. N. was inclined to believe that he had been mistaken in his diagnosis of internal metastasis. After several months, tumors again showed themselves in the same locality; these were treated, and likewise disappeared. Finally the cervical glands

became affected, and she began to suffer from asthmatic attacks, in consequence of pressure upon the pneumogastric; these were succeeded by an attack of pleurisy, due to cancerous exudation, and she finally died delirious. At the autopsy, the liver, lungs, and cervical glands were found infiltrated with cancerous material.

In speaking of the effects of electrolytic treatment upon cancer, Dr. N. stated that he had reason to believe it would always be successful if employed before the disease had become constitutional.

EPULIS AND MYELOID TUMORS OF THE JAW.—Prof. Gross, speaking of Epulis in a recent clinical lecture remarked that—

“He had never before met with a growth of this kind at so early an age as seven years. It is usually a tumor of slow growth and differing from myeloid in this respect; it is often painful; patients afflicted with it suffering much from toothache. Again, epulis is often partially osseous, frequently containing spiculæ of bone in the centre, detached from the surface of the bone. It recurs under the same circumstances with myeloid, that is, when all parts have not been completely extirpated, though perhaps less frequently than in the former. It is generally lobulated, as myeloid tumor in the same situation, but its structure is firmer. It is tougher and more elastic, owing to its fibrous structure. On section of myeloid tumors, more decided characteristics are noticed, which may be recognized by the naked eye. The cut surfaces are ‘smooth, uniform, compact, shining, succulent, with a yellowish, not a creamy fluid;’ presenting ‘blotches, of dark or livid crimson, or of a brownish or a bright blood color, or of a pale pink, or all these tints mingled on the grayish-white or greenish basis-color.’ Epulis on section is uniform, firm, white and shining, presenting often in its interior the spiculæ to which allusion has been already made. Before operation it is not easy to decide whether a tumor is epulis or myeloid, and though appearances on sections are more characteristic, they do not become available for diagnosis. As a matter of prognosis it is not of paramount importance that the exact nature of the tumor

be known before operation, supposing it one of these two forms, as neither is apt to return if *thoroughly* removed. Recurrence of each occasionally takes place, and it is somewhat more frequent in the case of myeloid; the periosteum should in all instances be scraped after operation. As the only certain means of relief, Prof. Gross recommends 'excision of the piece of bone to which it is attached.' "

KING'S COLLEGE HOSPITAL.

AMPUTATION OF THE HAND AT THE WRIST.—Sir Wm. Ferguson exhibited a man with an excellent stump, after amputation at the wrist, where the processes of the radius and ulna has been left. He advised that these processes should not be sawn off when healthy, as the breadth of the stump at the end of the arm was useful rather than otherwise.

Vesico-vaginal Fistula.—Ten days before, Sir William Ferguson had put in three stitches, with the hope of completely closing the fistulous opening, It had originated in the vaginal operation for stone nine years before. At the time, the healing process failed, and the operator had not again closed the wound. The patient was very young when operated upon for stone, and it was not easy then to stitch the wound. Sir William Ferguson saw her some time ago, and advised her to come into the hospital, in hope of closing the wound by suture; but the operation has been partly unsuccessful. To-day the girl said that the parts were quite dry, and on that supposition he proceeded to take out the stitches; but she had not given a correct account of herself, for urine was dribbling freely through the wound. He removed the stitches, but thought it unadvisable to do anything further then to the wound. He said that three or four operations were sometimes necessary in a case of this kind, just as for cleft palate.

Dislocation of Astragalus.—A man came into the hospital in consequence of having injured his ankle by a fall. The astragalus was dislocated outwards, and there was a good deal of effusion about the joint. On first looking at it, Sir William Ferguson thought that there might be a fracture; but as he could not freely manipulate the parts when the man was under chloroform, he

concluded it to be a dislocation. He attempted its reduction with the aid of three or four assistants, but was unsuccessful. He then divided the tendo Achillis and made the same trial, but again failed. What next was to be done? He thought he would not be justified in removing the astragalus, and therefore determined to place the foot on a straight side splint. He had seen tolerably good and useful feet after such a displacement, particularly if no violent inflammation set in, disorganizing the joint, and he hoped this would be the case with the present patient.

Aneurism at Base of Neck.—For this aneurism, Sir William Ferguson had tied the subclavian artery on May 25, five days ago. All had gone well till to-day after dinner, when a sudden gush of blood from the wound occurred. Mr. Rowe, the house-surgeon, immediately came to the assistance of the patient, and succeeded in stopping the bleeding by putting strong pressure on the wound. What seemed peculiar in this case was, that the usual time for secondary hemorrhage had not arrived. Had this been the ninth or twelfth day after the operation, it would not have been out of the ordinary course of things; but as it was only the fifth day, the hemorrhage could not be looked upon as simply secondary.

There have been several cases of secondary hemorrhage following in succession in this hospital. In the case of a lad with a wound in the lower part of the thigh, there was repeated formidable bleeding; and the superficial femoral artery was about to be tied when it ceased, and he went on favorably afterwards. A few weeks ago, Sir William Ferguson took out some dead bone in the locality, where there was great risk to the popliteal vessels. Great secondary bleeding came on, and only stopped after several stuffings of the wound. A girl, also, from whom he removed a tumour under the sterno-mastoid muscle, had profuse bleeding, of an apparently venous kind, coming from the great vessels at the root of the neck, and her case is now very critical, it being a question whether the wound should not be reopened and the internal jugular tied. In the mean time great pressure checks it, and Sir William thinks it most to be trusted.—*Brit. Med. Journal*, June 8, 1872.

CELERY AS A NERVINE.—A correspondent of the Practical Farmer says (*Med. Bulletin, Cincinnati Med. Repertory*) "I have

known as many men and women too, who, from various causes, have become so much affected with nervousness that when they stretched out their hands they shook like aspen leaves on windy days; and by a daily moderate use of the blanched foot stalks of the celery leaves as a salad, they became as strong and steady in limbs as other people. I have known others so very nervous that the least annoyance put them in a state of agitation, and they were in almost constant perplexity and fear, who were effectually cured by a daily moderate use of blanched celery as a salad at meal times. I have known other cured by using celery for palpitation of the heart."—[*Med. Cosmos.*]

MILK AS A DIET DURING LACTATION. By R. P. HARRIS, M. D., Pennsylvania.—From a series of trials which I have very successfully made, I have become convinced of the great value of milk as a food for delicate mothers who desire to nurse their own children. By the term "delicate" I do not mean those actually diseased, or apparently inclined to tubercular or other serious organic affections, but a large class of American women in the higher walks of life who fail as nursing mothers, either because their milk is too small in quantity or deficient in nutritive elements. Such women are generally below their proper average in weight; have little, if any color in their cheeks, and eat but a moderate amount of food. There may not be any deficiency in the development of their mammary glands, although their mammae are usually smaller than they should be; but this is chiefly due to the absence of adipose deposit. All such subjects do not bear a milk diet well; and in such the plan must be abandoned, as the diet should not only agree with the mother, but be palatable, so as not to diminish her appetite for her ordinary diet. She should be able to eat her three meals as usual, and consume the requisite amount of milk in addition. There are many women who have lost all their childhood's relish for milk, just as there are sometimes young children who do the same thing, and cannot be made even to try its efficiency. And there are others who are anxious for success, and do make the trial faithfully, but are reluctantly obliged to discontinue the diet in consequence, not of any disrelish, but of an inability to digest it.

Happily, there are also many who not only like the taste of milk, and can continue its use indefinitely, but who experience a wonderful degree of benefit from it, not only being able to nurse their infants, whom they would otherwise have to give to a wet nurse, or raise by hand, but greatly improved in health and strength, gaining flesh, increasing in appetite, and avoiding the ills resulting from the drain upon their system, so commonly experienced after a few months of lactation.—*Richmond and Louisville Medical Journal.*

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, June. 20, 1872.

DR. E. R. PEASLEE, President, in the Chair.

THE CURRENT MATERIA MEDICA.

DR. E. R. SQUIBB made the following remarks on "The Current Materia Medica":—

Materia medica should be thoroughly studied in connection with therapeutics, and the student should never be suffered to graduate without paying particular attention to this branch of curriculum. There is a tendency among some to almost ignore the materia medica. which is all wrong; it should be studied up to the times. Take, for instance, *hydrate of chloral*, which was first fully investigated and then applied to practical use. Persons are apt to use a remedy and extol it in medical text-books and journals without giving it a fair trial, thus creating a fashion in medicine. True progress is entirely different from fashion in medicine. In regard to the subject of *anæsthetics* and the mortality from their use, he has not, in the course of his extensive reading of home and foreign journals, seen a case of death in this country, and only two or three abroad during the year. This is accounted for by the little use of chloroform, and the predominance of ether; and the day is coming when the former will be confined only to the branch to which it belongs—the obstetrical.

Bromide of Potassium is more within the control of the profession than it was, and has taken its proper place in the materia

medica. Many times it is given in too small doses and no good effect is produced. The doses should be large enough to get up bromism; sometimes fifteen or twenty grains will do it, but in his experience forty, fifty, or sixty grain doses are called for; as a hypnotic, twenty-five-grain doses are essential.

He recollected a remark of Prof. Van Buren, that in order to get iodinism he gave iodide of potassium in sufficient doses; as high sometimes as one-ounce doses. The same rule is applicable to the administration of bromide of potassium.

Alkaloids, or active principle of drugs. No one expects to get from the salts of morphia such relief as from pure opium itself—although one grain of morphia equals six grains of opium. He believes that good opium will be the standard of the profession after all. The chemical processes in use for abstracting the alkaloids deteriorate the anodyne properties, and are destructive to the anodynes of our fathers. If practitioners were better satisfied to use the pure original anodynes, without being tortured, the results would be more satisfactory. It has been a great fashion to have fine-looking white alkaloids, which are made at the expense of medicinal qualities; for every time they are bleached by the chemist a portion of the valuable property is lost.

Another subject of importance is the *dietary of the sick*. The various extracts of meat sold at the stores are of little value; there is not one of them, which is advertised, which will bear out the remark of Dr. Christison, "they arrest waste but do not keep up the supply." His impression is, that there is not as much against the use of solid food or aliment in disease as has been said against it. The stomach is not a chemical laboratory, or "a kitchen for cooking food," as Abernethy wisely remarked. Food should not be subjected to the ordeal of chemists, as the fashion is.

Among the articles that have been introduced in the dietary department, and has taken a firm stand in the *materia medica*, is *pepsine*. Generally, however, patients have been in the habit of taking starch rather than pepsine. Once get up a reputation concerning a certain variety of this agent, the manufacturer has a good start for making money. Some specimens examined were good and others were bad. The name of the maker is no guar-

antee, as it may be good at one time and poor at another. While the proprietor is looking after the money column, the manufacture is entrusted to another. The fresh supply of pig's stomachs must come from the western pork-markets.

The pancreatic emulsions and preparations of bismuth and pepsine, so fashionable now, cannot be recommended: bismuth and pepsine cannot exist together. Those fashionable mixtures of beef and iron—as *Vinum cibi*, *Vinum cibi et ferri cum cinchona*, etc.—are gross frauds; only money is in them. Hardly any cod-liver oil will pass muster unless it is tasteless; and his impression is that many of these preparations are not cod-liver oil at all, only oil made up for the market. Good oils should neither be too dark nor too light, but of a medium color. The dark varieties are made of livers in a state of decomposition. There are good cod-liver oils in market which come from Norway and Newfoundland. The reason that the Norwegian oil is less rancid than others is, because it is never made at a less temperature than fifty degrees; consequently decomposition is avoided. Oil, when in use, should be kept in a cool place, as a refrigerator, and after each dose is given the glass should be thoroughly washed. Small pieces of ice put in doses of disagreeable substances, like cod-liver oil, render the agent almost tasteless. Those physicians who eschew the fashionable remedies take to the syrups, such as Aiken's syrup, etc. The lacto-phosphate of iron is based on fallacies like the others; but it is very taking, and is advocated by Horsford and others. Physicians are anxious to get solutions of phosphorus into the stomach, but before it gets there it becomes oxidized.

Another popular fallacy of the day is the use of sugar-coated pills or medical confectionary. Coroners have found these pills, after death, in the stomach and intestines, undissolved. Medicines should be given in such a shape that they will be quickly dissolved. It is not an easy matter to get the hard coat off the pills. Glycerine should be used in compounding pills, to render them soft. Pills made in this way are easily dissolved in the stomach. He has been astonished that Blancard's pill has been so useful as has been stated—it being covered with a metallic coat.

Medicines in capsules are not to be advocated—they being not easily dissolved.

The use of various forms of divided medicines, particularly "The Divided Medicine Co.'s" preparations, is another fallacy. It is nothing new, but an old way of preparing medicines. This way of dosing might be good if the physician would put the medicine up, but to purchase these preparations of companies is dangerous pharmacy.

Rhubarb in squares, covered with powder, is not desirable. Physicians should get the Chinese rhubarb, in solid state, and then they know what it is.

Disinfectants, like chloralum or chloride of aluminium, are fashionable agents. The sulphate of aluminium is better than the latter, but it is old; so, to popularize it, Prof. Gamgee took the chloride. To improve it in this country we have taken the name bromochloralum. Wastes of chemical manufactures are to be the source of disinfectants for health-boards. Copperas, or sulphate of iron, and carbolic acid are all that can be desired.

Cinchona barks from India will probably give us all that can be dispensed. Moss planted on the bark improves the quality—called mossine in that country.

Chloral received, about a year ago, a decided check on account of the number of deaths reported from its use; it is a potent agent, and has taken a very proper place in the *materia medica*.

Cundurango, which received its aid from the State Department at Washington, D. C., has pretty much gone out. That department deserves the reprobation of the physicians of this country. Reports have come back to the discredit of its use.

Nitrite of amyl, introduced by the foreign physicians, and first written about by Dr. Richardson, of London, is a useful remedy. Cases of hemicrania, spasmodic asthma, etc., have been relieved by its inhalation. It is supposed to paralyze the nervous system of the arterioles; from sixty-five to seventy beats may be added in a few seconds by its use. The circulation resumes its usual tone in a few minutes, and the effect of the remedy passes off.

Xylol has now degenerated into a prevention of small-pox, and it is very hard to place a value upon it.

An article which has been recently introduced from Ger-

many—*Rhamnus frangula*—seems to stand between rhubarb and senna, and is useful in constipation. The tincture has been prepared at the instance of Dr. Gray, of Utica, and is a good preparation; but it is better chewed; a few pieces chewed during the day will remove constipation.—(*Med. Record.*)

SIMPLE METHOD OF WATER ANALYSIS.

Every medical practitioner is familiar with the terrible risks attendant upon the use of bad water, and is anxious to employ the power and influence which he possesses in exposing those risks and in striving to avert them. But he is restrained by practical difficulties which are, in too many cases, insuperable. Local authorities are inert and often ignorant. The stupidity of the tenant is only equalled by the cupidity of the landlord. Water analysis costs money; and anyone who suggests its necessity is sure to be met instantly with the question, Who is to pay for it? Unfortunately, a proper analysis of water for sewage or drainage contamination is a process which from its complexity can only be carried out by a professional chemist; and in every important case such an analysis is a matter of necessity. But it is nevertheless true that it is perfectly possible to form a useful and, in many cases, a sufficient estimate of the quality of a water, and even approximately of the extent of its contamination, by the use of well-known methods so simple as to be available to every intelligent man, and certainly to every medical practitioner. The methods we are about to describe must, of course, be applied as accurately as possible, and the results interpreted with caution; but we have verified them all with care, and know that they may be depended on to the extent we indicate. For the sake of convenience, we have arranged them all for use with the weights and measures found in every surgery and chemists shop.

1. *Examination of the source.*—This is of vital importance, and will often supersede the necessity of any analysis by indicating that the water *must* be foul. The chief sources are three—namely, rivers, surface-wells or springs, and deep wells or

deep-seated springs. Wells 100 ft. in depth may be reckoned in the last class. The contamination of rivers may be judged of by circumstances which will occur to all: the nature of the house-and-land drainage they receive, the proximity of factories, &c. Few rivers are above suspicion, and many are utterly abominable as sources of supply. It is somewhat more difficult in many cases to judge of the contamination which a shallow well, often not more than 15 ft. deep, receives. Regard must of course be had to the proximity of drains, cesspools, stables, and the like; and much may often be gathered from a study of the nature and conformation of the land. Loose porous soil—such as gravel or broken chalk—is not only more liable to drainage contamination, but affords a more imperfect filtration than closer soil. Very shallow porous soils are often exceedingly foul from the stagnation and accumulation in them of manurial matters. The dip of the land is also an important element in the study. A cesspool below a well on a hillside may not pollute the water; but if above, the water will be almost sure to suffer.

The quality of the water of deep wells is still more difficult to determine by mere observation. If no surface-drainage can find its way in—a condition not always secured,—we have to consider the filtering efficiency of the bed of earth through which the water has to pass in its downward passage. The “previous sewage contamination”—the record of past fouling—in such waters is often high, but it by no means follows that the water may not be free, or nearly free, from unoxidised organic matter.

2. *General characters.*—The amount of suspended matter in the water should be observed carefully. When it has subsided, a portion may be examined under the microscope. Low forms of animal and vegetable life will often be seen, and this indication has some value, though not very much. In very bad water fragments of undigested muscular fibre can sometimes be seen. If a portion of this sediment be dried and burnt in a small porcelain basin over a spirit-lamp, it will exhale an unpleasant smell, if of animal nature. The colour of the water is best seen by looking down a tall jar or glass tube. It should be greenish-blue; but clay, peat, and other harmless contaminations, cause a yellow or brownish tint; and on the other hand, bad water has sometimes a tolerably good colour. The smell is often sufficient to

identify very bad water. Shake a sample in a bottle and warm it occasionally; a faecal or putrescent smell will often become apparent under these circumstances, though sometimes not until the bottle has stood for a day or two. It is a good plan to evaporate a portion of the water to dryness in a basin, and then heat it over a spirit-lamp. Any organic matter will blacken under these circumstances, but animal matters, if in any quantity will also give a bad smell.

Unfortunately, we cannot give any easy and exact process for the determination of this nitrogen. But a useful though somewhat rough indication may be obtained as follows:—Concentrate a portion of the water (say two fluid ounces) to one-eighth of its bulk, avoiding boiling. Let it cool, and pour it into a test tube of about one-third of an inch diameter as much as fills nearly an inch of it. Add an equal bulk of *pure* concentrated sulphuric acid. When the mixture is quite cold hold the tube almost horizontally, and pour in gently about an equal bulk of a pretty strong solution of green vitriol. The iron solution will float on the acid mixture. Let the tube stand for half an hour; and look at the line of junction of the two liquids. If a dark line is visible the water *does not contain less* than 5 part of nitrogen in 100,000 though of course it may contain more. This is equal to a previous sewage contamination of 5000 in 100,000.

Now for the use to be made of this determination. If the water is from a deep and apparently unobjectionable well, and if the general characters are good, the water need not be condemned, for chalk waters often contain more nitrogen. If the water is from the river or surface-well of tolerably good character, the indication is sufficient to throw a very grave suspicion on it. And lastly, if the history of the water is bad, if it is known or strongly suspected to be contaminated, the indication stamps it at once as certainly dangerous.

By varying the concentration of the water it is possible to arrive at a pretty fair idea of the quantity of nitrogen in the water. Some water reacts without any concentration.

4. *Chlorine*.—We have on a previous occasion pointed out the value of this indication. By an examination of the best water a neighbourhood affords, it is easy to find the amount of chlorine which is natural to the water. In the south of Eng-

land it seldom amounts to more than 1 part in 100,000 except where sea-water penetrates. Purely local causes may of course produce an excess, but not very often. The determination may be made with sufficient exactness in the following manner:—Dissolve 88.3 grains of pure nitrate of silver in 1 pint of distilled water, and dissolve separately 4 grains of yellow chromate of potash in $\frac{1}{2}$ -pint of water. Take 4 ounces of the water to be examined in a tumbler or beaker; add 10 minims of the chromate solution a drop at a time from a minim glass. As soon as the faintest tinge of red appears, read off the number of minims of silver solution which have been added. Every minim indicates 0.1 part of chlorine in 100,000 of the water, so that uncontaminated water ought not to require more than 10 minims to give the red tint in 4 ounces.

5. *Permanganate test.*—The great objection to the last two methods is, they only tell of a previous contamination which may possibly have ceased to be noxious. Of the methods which tell of the present condition of the water, the only one which can be easily applied is the permanganate test, which, unfortunately, is the least trustworthy of them. It depends on the fact that many kinds of organic matters, and particularly putrescent organic matters, are oxidised by permanganate of potash in presence of sulphuric acid. The permanganate, losing its oxygen, loses its beautiful violet colour and the amount of permanganate decolourised by a given volume of water is therefore some kind of measure of the amount of organic matter in the water. Unfortunately, however, different kinds of organic matter affect the permanganate very differently. Some, urea for instance, do not affect it at all, and, on the other hand, some mineral matters, such as nitrites, sulphites, and protosalts of iron, decolourise it easily. Nevertheless, water which decolourises much permanganate is generally bad water, and we therefore give the test for what it is worth. Dissolve 3.3 grains of pure permanganate of potash in one pint of distilled water. Take one pint of the water to be examined; introduce it to a colourless flask, add 5 fluid drachms of dilute sulphuric acid (1 part strong acid + 5 parts water, by measure) and add the permanganate from the minim glass a little at a time, as in the chlorine process. After every addition shake the flask and let it stand ten minutes. If the

violet colour disappears, add a little more, and so on, until the violet colour, not a brown) remains permanent for ten minutes. If the quantity required is large it is better to dilute another portion of the water with distilled water and begin again. Each minim of permanganate used in this process represents .001 part of oxygen given up to 100,000 parts of water. To give an idea of the working of the test we may quote the results of its application to the London waters in 1865. For the quantities of material given above, the permanganate used may be said to have varied from 5 to 200 minims. Accordingly the quantity of oxygen required to oxidise the organic matter in 100,000 parts of water was taken as varying from 0.005 to 0.2 part.

That these methods are rough we freely admit, but we believe they may be safely used, with due care, in those cases in which a proper scientific analysis cannot be obtained.—*London Lancet.*

THE TREATMENT OF FEVER.

BY DR. C. MURCHISON.

1. To remove, when possible, the cause on which the fever depends.

2. To promote elimination, not merely of any morbid poison, but of the products of exaggerated metamorphosis in the blood and tissues.

3. To reduce the temperature and the frequency of the action of the heart.

4. To maintain the nutrition of the tissues, and stimulate the action of the heart, by appropriate food and stimulants, taking care at the same time, not to excite congestion, or increase the work of the already overtaken glandular organs.

5. To relieve dangerous and distressing symptoms.

6. To obviate and counteract secondary complications.

1. Unfortunately, it is not often that we have it in our power to remove the cause of pyrexia; but the object is one always to be kept in view, and sometimes the main efforts of our treatment must be directed to secure it; as, for example, pyrexia dependent upon pent-up pus, an obstructed bowel, or gouty, syphilitic, or periosteal inflammation.

2. The elimination of any morbid poison, as well as of the products of exaggerated metamorphosis, will often be promoted by the judicious employment of diaphoretics, diuretics, purgatives, and emetics. The old practice of commencing the treatment of pyrexia by giving a purgative, to unload the portal circulation and promote the action of the liver, is undoubtedly a good one, and particularly advisable in persons of robust habit, or who live too well. In mild cases of pyrexia, the only treatment necessary consists in the avoidance of any chill, and in the administration of a mild aperient, followed by frequent doses of diuretics, and diaphoretics, such as the citrate of potash, or the liquor ammoniæ acetatis with spirit of nitrous ether. Elimination will also be promoted by a plentiful supply of fresh air, which will favor the escape of carbonic acid from the lungs, and by the free use of diluents, which will help to wash away through the kidneys the products of tissue-waste. In all grave cases of fever you will remember the importance of maintaining the action of the kidneys, and of keeping a good watch on the state of the urine; noting carefully not so much its color and the presence or absence of lithates (both of which characters will depend much on the quantity), but the quantity and the presence or absence of albumen. When the quantity becomes notably diminished, or albumen appears, advantage will often be derived from hot poultices to the loins, aperients, diaphoretics, diluents, and diuretics. But while you promote elimination, you must take care that the means for this end do not weaken too much the action of the heart; and you must remember that, in some fevers, the natural process of elimination are excessive, and conduce to dangerous exhaustion and death.

3. For reducing the intensity of the pyrexia, different measures have been proposed,

Blood-letting was at one time universally resorted to for this object, but in this country it is now entirely discarded, because it was found to increase one of the great dangers in pyrexia viz., failure of the heart's action. There are few accurate observations on the effects of blood-letting on the temperature of pyrexia; but we know that, when a copious bleeding of the nose or the bowel takes place in enteric fever, although the temperature may fall below the normal standard, it speedily regains its former height, or rises above it.

The external use of cold water is one of the most certain means of reducing the temperature in pyrexia, and in certain cases is attended with good results. The attention which this practice is now attracting will justify the following remarks: In the seventeenth century the brothers Hahn of Leipzig, treated fevers by the external use of cold water, but their observations were soon forgotten. Towards the end of the last century (1787) cold affusion was proposed by Dr. Currie, of Liverpool, both for arresting and mitigating fever. The patient was seated naked in an empty tub or bath, and several buckets of water of a temperature of 50 or 60 deg. Fahrenheit, were poured from a height of from 2 to 3 feet or more over the head and chest. He was then hastily dried and restored to bed, and in most cases the operation was repeated once or twice daily. It was stated that in many cases, if resorted to during the first three days, this treatment arrested the disease; while in others it reduces the pulse and temperature, relieved many of the distressing symptoms, and particularly the headache, restlessness and delirium, and conducted the disease to a safe and speedy issue. The affusions were employed at any stage of the fever; but the effects were always most salutary at an early stage. They were said to be contraindicated when the temperature of the skin, ascertained by the thermometer, was not much above the normal standard, or when, notwithstanding an elevation of temperature, the patient complained of chilliness, or suffered from severe diarrhœa or profuse sweating.

The wonderful results obtained by Currie were confirmed by numerous observers in different parts of the world, whose testimony is recorded in the edition of his work published in 1804.* But in the British epidemic fever of 1817-19, the practice was followed by many with great perseverance, and the general result, according to Sir Robert Christison, was that in very few cases, if any, was the disease arrested by it; that although an abatement of febrile heat and restlessness occurred almost invariably, it was of short duration, and not to be made permanent by any frequency of repetition; that as much good eventually was attained by frequent cold and tepid sponging, together with cold applied to the head; and that often the cold affusion occasioned for a time

* *Medical Reports on the Effects of Water, Cold and Warm, as a Remedy in Fever.*
By James Currie, M.D., F.R.S., 1804.

after each application an intense feeling of pressure and weighty feeling in the brain, which could not be regarded without some uneasiness.* The statements, backed by professional and popular prejudice, account perhaps for the subsequent neglect of cold-water treatment of fevers. But the observations made of late years by Brand, of Stettin, Jurgensen, of Leipzig, Liebermeister, of Basle, Ziemssen, of Erlangen, and H. Weber and Wilson, of London, show that although the practice may not shorten the fever, and is often inapplicable, yet under certain circumstances it is useful not only for reducing the temperature, first of the surface and then of the interior of the body, but for relieving headache and other distressing symptoms, removing congestions of the kidneys, warding off delirium and coma, and rousing the nervous system in cases of excessive stupor. The circumstance has perhaps been too much lost sight of, that cooling the body may not influence the conditions on which the development of heat depends; but with reduced heat it may be assumed that there will be diminished metamorphosis, to the non-elimination of the products of which many of the dangers of fever are due. In point of fact, Schroeder, of Dorpat, has ascertained that cold baths effected a marked diminution in the excretion of carbonic acid and urea in fever;† and as this was not attended by any aggravation of the general symptoms, it is fair to attribute it to a retarded metamorphosis of tissue.

Statistics have been appealed to to prove the great success of the cold water treatment of fever (particularly of enteric fever) as contrasted with that of an expectant method; and although other conditions not stated may have helped to influence the result, they suffice to show that the practice is not beset with the dangers commonly imagined. But the most conclusive facts in favor of the practice are those observed in certain cases of hyperpyrexia by Dr. Wilson Fox‡ and others, where its employment was followed by recovery from an elevation of a temperature (110 deg. Fahr.) which, under every other method of treatment, has been speedily followed by death. At the same time there are many cases of pyrexia in which the cold affusion

* Article "Continued Fever" (*Library of Medicine*, vol. 1, 1840).

† Ueber die Einwirkung kalter Bäder auf die Gas-und Harnstoff-Ausscheidung beim Typhus.—*Deutsch. Archiv klin. Med.*, 1869, Bd. vi., S. 385.

‡ *On the Treatment of Hyperpyrexia by Means of the External Application of Cold.* London, 1871.

or immersion would be unsuitable or injurious. It is likely to be of the most service when the temperature is under 102 deg. Fahr., or when the extremities are cold, although the temperature of the central part of the body be high; and it must always be employed with caution when there are the signs of weakened cardiac action or of stagnation of blood in the capillary circulation, although it may be noted that in one of Dr. Fox's patients, who was apparently rescued from death, the face was cyanotic, and the radial pulse imperceptible.

There are different plans for employing cold water in the treatment of pyrexia, such as the cold affusion practised by Currie, packing in a cold wet sheet resorted to by Brand, or immersion in cold baths. The last is the method now most in fashion. The patient is placed in a bath having from 50 deg. to 70 deg. Fahr., or better, as Ziemssen recommends, in one whose temperature is about 10 deg. below that of the body, but which, after the patient's immersion is gradually cooled down to 68 deg. by adding cold water. He should remain in the bath for half an hour, or until shivering comes, and all the time he is in the bath his limbs ought to be rubbed by assistants. He is then to be hastily dried and put into a warm bed. For some time after the bath the temperature in the rectum continues to fall as the trunk parts with its heat to the extremities; but as soon as the temperature in the rectum rises again to 104 deg., the patient ought to have another bath. In the early stages of the fever as many as seven or eight baths in the day may be necessary. When cold affusion or immersion is contraindicated or inexpedient, frequent sponging of the surface with cold or tepid water will also help to cool the body, and is often a source of much comfort to the patient.

Quinine in large doses has an undoubted influence in lowering the temperature of pyrexia. In most cases of severe pyrexia, ten, fifteen, or twenty grains will, within an hour or two, cause a fall of the temperature to the extent of three or four degrees, and to a less degree of the pulse.* It is true that the effect passes off after a few hours, and that there is no good evidence (except in malarious fevers) of its cutting short the natural course of the attack; but the effect may be maintained by a

* For evidence on this point, see Report of a Committee (of which I was a member) of the Clinical Society.—*Trans. Clin. Soc.*, 1870, vol. iii.

repetition of the dose ; and the remedy has often appeared to me to be of signal service when a pyrexia was at its crisis, and when the temperature was rising in place of falling.

Digitalis, *Aconite*, and *Veratrum Viride* have a marked power in reducing the pulse, and, to a less extent, the temperature in pyrexia, and are, in my opinion, too much neglected for these objects in practice. *Veratrum viride* is largely used in America in the treatment of fevers, and its effect upon the pulse is speedy and most decided ; the only objection to its use in private practice which my experience suggests is its liability to induce sudden nausea and faintness, but these symptoms are transient, and cease on the administration of a stimulant. Ten or fifteen minims of the tincture may be given every four or six hours. *Aconite* is a remedy of great value for reducing the pulse and temperature in fever, and especially in the pyrexia resulting from local inflammations, and is much less used than it deserves to be. *Digitalis* is another remedy which I have often found very serviceable in various forms of pyrexia. While increasing the force of the cardiac contractions, it diminishes the frequency of the pulse, reduces the temperature, and increases the flow of urine. Lastly, *antimony* reduces in a marked degree, the frequency of the pulse in pyrexia, and promotes diaphoresis and mucous secretion. It was at one time largely used in all fevers, but in many it is contraindicated by its tendency to weaken the contracting power of the heart.

4. The nutrition of the body must be maintained by appropriate food, in the form of milk, beef-tea, eggs, and farinaceous articles. Not long ago it was a custom to starve fevers ; and you may probably have heard that the late Dr. Graves, of Dublin, who was mainly instrumental in doing away with this objectionable custom, expressed a wish that his epitaph might be "He fed fevers." The modern tendency, however, is perhaps to over-feed fevers, and especially to give too much nitrogenous food. Dr. Parkes has shown that there are theoretical objections to a purely nitrogenous diet in fevers. It is doubtful if the disintegrating nitrogenous tissues can be fed ; and in that case the albuminous food must be got rid of by the already over-tasked glandular organs. Milk is in most cases preferable to beef-tea as an article of diet in fevers.

In many cases of fever it will be necessary to give stimulants. You must not give stimulants simply because the patient has fever. Many patients with fever do better without them. But you must not refrain from giving stimulants when the heart shows signs of weakness, as happens in the advanced stages of most protracted fevers. The heart may be artificially stimulated by sinapisms and other irritating applications to the skin, but better by the internal administration of ammonia, ethers, and alcohol, in quantities proportioned to the weakness of the heart and pulse.

5. In every case of pyrexia, you must combat dangerous symptoms as they arise. Stagnation of blood in the pulmonary capillaries, impeding the aeration of the blood, is to be met by stimulants, such as alcohol, carbonate of ammonia, and ethers. Digitalis, by strengthening the heart's action, and turpentine, which seems to stimulate the capillary circulation, are also useful under these circumstances; while advantage will likewise be derived from mustard and linseed poultices to the chest, and from warm applications to the feet. When uræmic symptoms predominate, the action of the skin and bowels is to be promoted, digitalis and saline diuretics may be given to increase the flow of urine, sinapisms and linseed poultices are to be applied over the loins; while attempts may be made to rouse the patient by cold affusion to the head, by blistering the shaven scalp with liquor ammonia, and by sinapisms to the nape and feet. In many cases of fever you will also be called upon to relieve distressing symptoms—such as diarrhœa, pain, sleeplessness and delirium—which, if unchecked, hasten exhaustion and prevent recovery.

6. You must counteract, as far as possible, secondary complications, which will vary according to the primary cause of the pyrexia, and which always add to the patient's danger.

Lastly, I would caution you against two errors in the treatment of pyrexia:

1. You must take care that the remedial measures which you adopt in no way thwart the natural modes of recovery, or favor the natural modes of death.

2. At the same time, you must not be content with adopting a treatment of pure expectancy. You must not forget that the natural termination of pyrexia may be death, as well as recovery.—(*British Med. Journal.*)

THE ASPIRATOR IN SURGERY.



M. Labrè a young surgeon and *agrégé* (sub-professor), has been doing wonders with the capillary or aspiratory trocar—the instrument patented by Dieulafoy, of Paris. M. Labbè informed me, while on a visit to the Hôpital de la Pitié, that he had, the previous evening, punctured the bladder above the pubis of an elderly gentleman who was suffering from retention of urine resulting from an enlarged prostate.—This was done with the above named instrument, and 700 grammes (about 22 ounces) of urine were drawn off at one sitting. Several ineffectual attempts had been made to introduce a catheter, which ended in making a false passage towards the rectum. M. Labbè prefers Dieulafoy's trocar to the other methods in vogue, as being perfectly innocuous, the wound healing immediately.—He had performed the same

operation several times—both in his nosocomical and private practice, and intends submitting his observations to the Academy of Medicine. A very interesting thesis has been written on the subject by Dr. J. Watelet. In the case under notice, M. Labbè was to relieve the bladder in this way once or twice in the twenty-four hours, according to the urgency of the symptoms; and that he will repeat daily until the wound in the urethra is healed, when he will

resort to other means for the removal of the cause of the retention of urine. I may here observe that many surgeons already predict one great disadvantage in this new method—not to the patients, but to the future generation of surgeons—as catheterism, which even nowadays is so little confided to students would run the risk of being altogether put aside. The capillary or aspiratory trocar, intended at first only as an exploring instrument, was not much larger than an ordinary urethra-syringe. This was gradually increased in size, and was then employed for opening large abscesses and cavities containing liquid. M. Collin, successor to Charrière, has still further improved the instrument, in such a way that it may be used not only for emptying abscesses and cavities, but for washing out or injecting these, and it is of a size, containing from 120 to 160 grammes, that these operations may be performed without deranging the instrument. This new trocar is, I think, destined to render great service both in medicine and surgery; and it struck me that it would be preferable to the ordinary lancet in venesection, as the risk of air entering the vein is *nil*, in which case the needles would of course have to be made a little thicker, so as to have a good and uninterrupted flow, and the ligature above the elbow may be dispensed with.—*Med. Times and Gaz.*, May 4, 1872.

[We give above a woodcut of this instrument, as manufactured by Messrs Tiemann & Co., of New York.]—Ed.

DISINFECTING CHAMBERS.—The corporation of Dublin have constructed a hot-hair-chamber, in which clothes and bedding are disinfected for the public, the fees charged for the process being nominal. The walls and ceiling of the compartment in which the clothes are heated are built of brick, and its floor is composed of perforated iron plate. The heat is supplied from the exterior surface of a coil of pipe eighty feet in length, which acts as a part of the furnace flue. The products of combustion escape into the atmosphere without passing into the close chamber, and no emanations from the infected clothes can pass into the open air; this disinfecting apparatus cannot, therefore, taint the atmosphere of the locality. A disinfecting apparatus of this kind should be erected in every large town. Clothes may be disinfected in a common oven, if care be taken to prevent the temperature from extending beyond 300 degrees.—*Med. and Surg. Reporter.*

POST-MORTEM DELIVERY.—*The Indian Medical Gazette* for June contains the following interesting communication :

“ *The Medical Press and Circular* of April 3 contains two letters by Drs. Swayne, of Carrick-on Shannon, and Lanigan, Ballymahon, describing two instances of post-mortem expulsion of the foetus through the agency of gaseous distention of abdomen. Dr. Swayne states that ‘he never heard or read of a similar instance.’ We suspect that the incident is not an uncommon one in Indian medico-legal practice. We can recall at least one instance of such an occurrence. The body of a pregnant woman is despatched from a distant part of a district, and wrapped up rather loosely in a coarse cloth and bamboo matting. On arrival at the sudder station the civil surgeon finds it semi-putrid, eyes bursting, limbs widely apart, and abdomen swollen and hard as a drum. On removing the coverings, a foetus is found beneath the things, and the uterus not unfrequently prolapsed, while the bystanders declare that when the body was started nothing of the kind was observed. Dr. J. H. Aveling, gives notes in *The Lancet* of April 27, of six instances of post-mortem delivery. In five of these the delivery took place after the women had been committed to their coffins and graves. These examples are drawn from old records, but they have an air of circumstantiality and truth about them. In one instance the infant was extracted alive from the coffin. It would be very interesting and medico-legally important to find, as we have hinted is probable, that what is considered in England a curious and rare phenomenon is in India a common and familiar circumstance. In *The Indian Medical Gazette* for August, 1867, Dr. R. F. Hutchinson, then civil surgeon at Patna, has recorded a good case of post-mortem parturition which he considered unique. The medico-legal relations of effects produced by putrefaction can perhaps be better studied in India than in any other country in the world; because the conditions causing it are ever present in varying degrees, and the instances of changes of all kinds and degree due to the influence of the heat and moisture abound. We have seen the viscera of the abdomen occupying the cavity of the thorax, into which they had been thrust through a rent in the diaphragm, of whose post-mortem causation there could be no reasonable doubt.

ST. THOMAS'S HOSPITAL, LONDON.—This new and imposing structure, situated on the right bank of the Thames, covers nearly an area of twelve acres of ground. The whole cost of the buildings, with furniture, amounted to about \$2,500,000.

CONCEALED PRÆ-PARTUM HEMORRHAGE.

Mr, Joshua Parsons, of Frome, writes to the *British Medical Journal* :—

The three cases which I am about to detail have occurred to me at long intervals in a tolerably extensive midwifery practice of many years' duration : and, although they belong to a class well recognized and often described by writers on the subject, yet I have found in conversation that many brother practitioners of intelligence and experience, not having had their attention specially directed to such cases, possess but vague ideas of their nature and treatment. There are, however, few accidents interfering with the even tenor of natural parturition more distressing to witness, or calling for more clearness of diagnosis and decision of treatment on the part of the medical attendant, than those of which I am about to speak. It has, therefore, struck me that a record of these three instances, though not otherwise very interesting, may form a foot-print for whose guidance some perplexed and anxious brother may be thankful.

Case 1 occurred in 1840. The patient was the wife of a weaver, a strong and healthy primipara, arrived at the seventh month of gestation. On February 8th she was seized with faintness and a feeling of painful distension of the abdomen ; but, as no labor pains occurred, no treatment was adopted by the midwife beyond keeping the patient in bed. As, however the pallor and distension increased, I was summoned on the 12th, and found the woman exhausted and exsanguine to a remarkable degree. Upon examination, although there had been no pains or discharge, the os uteri was flaccid and dilatable, the membranes unruptured, and the face presenting. I had at the time no idea of the nature of the case with which I had to deal ; but possessed with the dread, instinctive in an accoucheur, of seeing my patient die undelivered, and miles away from instruments or professional assistance, I introduced my hand into the unresisting uterus, and immediately delivered the small dead fœtus by the feet. Finding the abdomen but little diminished in size, I thought there was another child to be born, and plied the woman freely with brandy and ergot ; and after a while had the satisfaction of finding the placenta thrown off. The cause of danger and perplexity then became evident ; for I removed from five to seven pounds of old

black coagula. The uterine surface of the placenta showed that it had been detached over its larger part. The woman slowly recovered to a great extent, but was ever afterwards an invalid and remarkable for her extreme pallor.

Case 11 occurred on December 4th, 1860, to one of those unhappy individuals whose bairntime (to use a Scottishism) was a catalogue of disasters. She had arrived at the eighth month of her eleventh pregnancy, when she was, at 4 o'clock on the morning mentioned, while lying quietly in bed, seized with sudden deadly syncope. As she lived close to my house, I saw her in a few minutes; and recognizing the nature of the case, I examined and found the head presenting, and the funis prolapsed. Being thus enabled to assure myself that the child was dead, and knowing from former experience that to deliver the patient with forceps was a work of time and difficulty, I did not hesitate to resort immediately to craniotomy, and after giving ergot, to remove the placenta and a large mass of coagulum which appeared to be of recent formation. The patient recovered and had children subsequently.

Case 111.—This patient is the wife of an innkeeper living four miles from my house, and was expecting her seventh confinement in November last. For four days she had been observed to lose her color, and complained of hardness and tension of the abdomen, but had continued to move about and attend to her household duties. On the afternoon of the 19th she fell suddenly in her kitchen, and was for a long time unconscious. When she was carried to bed, a slight discharge of blood was observed, and I was sent for, being told to come directly, as she had a fit. When I arrived she had become conscious, but was tossing about pale and pulseless, with no labor-pains, but a slight sanguineous discharge from the vagina. On examination, I found the os about the size of a shilling, occupied by distended membranes, but very hard and resisting. I immediately sent for my son, Dr. Parsons, asking him to bring various instruments, and intending, as the urgency of the case seemed increasing every moment, to deliver as soon as he arrived. As, however, by reason of distance, a considerable time must necessarily elapse, I determined to do something; and so I ruptured the membranes, and gave at once two drachms of the liquid extract of ergot, repeating the dose in half an hour. Fortunately these means were successful in controlling the hemorrhage; and on my son's arrival

the aspect of affairs had so much improved, that we considered it right to wait awhile and watch for the issue. About midnight labor-pains came on, and the woman was delivered naturally about A. M. The child had been evidently dead for some days, and the placenta was followed by a great gush of fluid blood and many pounds of old clot. The woman is still suffering from exhaustion and bloodlessness, but will, I trust, ultimately recover.

The cause of the accident of which I have been speaking is, to me, obscure. In neither of these cases had there been any over-exertion, nor had either of the patients been exposed to any of those shocks of body or mind which we are accustomed to see followed by hemorrhage and premature birth. In the first and third cases, the pallor and painful distension showed that a moderate discharge of blood had been taking place between the placenta and uterine walls for some days before a sudden and unaccountable increase occurred and produced the alarming symptoms already described. Although the issue was fortunate in these instances, yet I need not tell you it is by no means always so, two or three fatal cases having occurred within my own knowledge. In the last case, my distance from home led me to adopt measures which fortunately proved successful; but, looking at the tendency to sudden increase of symptoms, I would not voluntarily run the risk of delay, but should make it a rule, where I had reason to believe that subplacental hemorrhage was going on, to induce labor and complete the delivery of the patient by the speediest method suitable to each particular case.

I do not know any condition likely to cause difficulty in the recognition of this accident. In the second case, the sudden and complete collapse and violent pain might at first have led to a supposition of ruptured uterus or abdominal pregnancy; but the round, well-defined uterus, hard as a cricket-ball, and perhaps the absence of tenderness, would at once clear up the difficulty. In neither case did I observe any diseased condition of the placenta likely to account for its separation from the uterus, though the appearances plainly indicated that such separation had taken place to a very large extent.

METHOD OF DETECTING SMALL QUANTITIES OF SUGAR IN URINE.

Dr. J. Seegen, Professor in the University of Vienna, says in the *British Medical Journal*, Trommer's is the most reliable and delicate test for sugar. With its aid I am able with certainty to make out 0.3 milligramme (0.045 grain) of sugar dissolved in 10,000 times the amount of fluid. This great delicacy of the test, however, only holds good as long as we have to do with a watery solution of sugar. If, on the contrary, small quantities of sugar are to be detected in urine, Trommer's test is neither delicate enough nor reliable, for two reasons. 1. Urine contains certain substances (coloring matters, creatine) which prevent the sub-oxide of copper when formed from being precipitated; no separation of the reduced sub-oxide of copper therefore, takes place, the blue fluid only becoming yellow or yellowish-brown, or presenting a turbid discoloration. 2. The same processes of reduction are also brought about by uric acid; and urine containing a considerable amount of uric acid acts on Fehling's test-fluid exactly in the same manner as urine containing 0.1 to 0.2 per cent of sugar.

The method devised by me has for its object the exclusion of those other constituents of urine which would disturb the proper action of the test, and the transformation, as it were, of the saccharine urine into a watery solution of sugar. Animal charcoal has the property of retaining most of the constituents of urine, more especially the coloring matters and uric acid. After filtering a watery solution of uric acid through charcoal I could (provided the charcoal had been good), after repeated filtrations, not find a trace of uric acid in the filtered fluid. Now, in order to detect small quantities of sugar in urine, I proceed in the following manner:

I filter one or two ounces of the urine several times through good animal charcoal until the urine is completely colorless.

This operation only takes a few minutes. Then I wash the charcoal on the filter with a little distilled water, and to this water, when filtered off, I apply Trommer's test. The water with which the charcoal has been washed is almost as sensitive to Trommer's test as a watery solution of sugar, and in it I could detect even 0.01 per cent of sugar by a beautiful red precipitate of suboxide of copper, whilst the original saccharine urine, when not filtered, only pro-


duces a yellow discoloration of Fehling's test fluid. With urine containing a little more sugar—say 0.1 to 0.2 per cent.—the water flowing off from the second and third washing, acts even more energetically upon the test-fluid than that of the first washing, producing an even purer deposit of suboxide of copper. The water obtained by the subsequent washings thus evidently contains the sugar in a purer form. With normal urine, the water obtained by the above process is either entirely inactive towards Fehling's test-fluid, which remains blue, or it assumes only, after a while, a slight dichroid (varying color according as the light falls on or passes through) turbidity. The water obtained by a second or third washing always remains without any effect. When the quantity of sugar has to be determined, the urine must not be filtered through charcoal, as the latter always retains a certain quantity of the sugar which cannot be removed again by washing.

HYDRATE OF CHLORAL IN TRAUMATIC TETANUS.—Dr. Joseph R. Beck, of Fort Wayne, Ind. (*St. Louis Med. and Surg. Journal*), has compiled 35 cases of traumatic tetanus, and reports one case of his own, 30 of which were treated by chloral alone; 2 by chloral with the continuous current; 1 by belladonna and bromide of potassium; 2 by chloral and calabar bean; and 1 by chloral belladonna, and ice to spine. Of those treated by chloral alone, 16 recovered; the two cases treated by chloral and continuous current recovered; one of the cases treated by chloral and calabar bean recovered; the case treated by chloral, belladonna, and potas. bromide got well; chloral, in connection with belladonna and ice to the spine, proved successful in the one reported case. He does not propose to discuss any of these conclusions, inasmuch as the statistics at this time at the command of the profession are too meagre as to all other remedies than the calabar bean and hydrate of chloral, and are too recent to admit of a true estimate of the latter. As far, however, as the statistics contained in his paper are concerned, Dr. Beck believes that the remedy discussed makes a very favorable exhibit, and is disposed to give it the preference over any or all other remedies in this disease. Perhaps, under a peculiar state of circumstances, he would conjoin other treatment, especially the continuous electric fluid, but his chief reliance would be placed upon chloral. In a future paper he will compare the results attained by the physostigma venosum with those credited to the hydrate of chloral; and thus add a page of comparative statistics to the general fund.

The Canada Lancet,

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TORONTO, SEPTEMBER 2, 1872.

LACTO-PHOSPHATE OF LIME.

In a great number of acute diseases as well as in all low forms, such as typhoid and typhus, there is a great tendency to asthenia, occasioned by the peculiar character of the malady or the constitution of the patient, and marked by a constant rise of temperature. The latter phenomenon is due to a disintegration of the tissues ; all molecular changes in the organism are attended by the formation of heat, and these changes are under the influence of the ganglionic nervous system. Any substance, therefore, which produces a sedative influence on this nervous system will have a tendency to retard the process of disintegration, and hence lower the temperature. Such is the *modus operandi* of alcohol, tea, coffee, &c., in the treatment of low forms of disease. In consequence of the great atony which follows the long continued arrest of nutrition in these diseases several months may elapse before convalescence is fully established. It is in the treatment of this condition of things that the "lacto-phosphate of lime" is so highly recommended. The reason of the failure of the salts of lime to realize the marked and precise affects expected in the treatment of rickets, osteomalacia and fractures is that the pulverulent phosphate of lime is the preparation invariably prescribed. The gastric juice of the stomach contains only a small quantity of the natural solvent, lactic acid, and consequently only a small proportion is capable of absorption. It is

therefore necessary in order to obtain the beneficial effects of this substance, to use it in a perfectly soluble state. The lacto-phosphate of lime, first recommended by M. Dusart on account of its solubility, is therefore admirably adapted to fulfil the indications requiring the administration of the salts of lime. It is not only a medicinal agent of the highest value, but also an important aliment or article of food, and its administration can not, like that of alcohol, produce mischievous effects, as it never depresses the nervous system. It is best administered in the form of a syrup. This preparation is extremely palatable, and is readily taken by children. Dr. Black of Paris, used it with marked success in the treatment of typhoid fever during the siege of Paris. Owing to the defective sanitary and hygienic state of the city, and the moral effect produced by the siege, the epidemic was very grave and of a low type. The administration of this remedy was almost invariably attended by lessening of the frequency of the pulse and a diminution of the temperature of the body, at the same time the countenance lost that expression of stupor which is so characteristic of the low forms of the disease. But it is more especially during the period of convalescence that its beneficial effects are most strikingly seen. It excites digestion, increases the assimilation of alimentary substances, awakens muscular energy, and secures a speedy restoration to the natural condition. It is also highly recommended in the treatment of dyspepsia, especially when combined with pepsin. The wine of lacto-phosphate of lime administered after meals is found very serviceable in the atony and general exhaustion peculiar to aged persons. It aids digestion, promotes assimilation, and arouses muscular and nervous energy.

The syrup of the lacto-phosphate of lime may be prepared as follows :—Take concentrated lactic acid ℥j., dilute it with ℥ij. of pure water, add of the magma of freshly precipitated phosphate of lime enough to saturate, orange-flower water ℥jss., and filter; then add pure water to make ℥viij., and put in ℥xj. of white sugar. Each drachm contains from two to three grains of phosphate of lime. The dose of the above for an adult is from one to two table-spoonfuls three or four times a-day.

Dr. Henry Hancock has been elected president of the Royal College of Surgeons, England, and Drs. Curling and Le Gros Clark, vice-presidents, for the ensuing year.

PUBLIC BATHS.

It has been aptly said that the virtue of "cleanliness is next to godliness. This virtue which is also so necessary to health, is one to which very little attention has been paid by the civic authorities. Every day or so we read of casualties resulting from bathing in our bays and rivers, and the wonder is that they are not of more frequent occurrence. Boys are instinctively fond of swimming and paddling about in the water, whenever it is sufficiently warm to admit of it. During the hot weather in summer they often shock the modesty of delicate ladies and gentlemen by performing their ablutions in some of our public places, when not prevented by the police. The severe heat of the last two months has rendered frequent ablutions not only essential to comfort but also beneficial to health, and since many of the houses in which the laboring classes live, and many of the better classes also, are unprovided with suitable conveniences for bathing, a large proportion of the community must either have dispensed with that requisite altogether, or have had recourse to our bays and rivers. Of course there are in the cities of Montreal, Toronto, and many other towns and villages, a few institutions where baths may be obtained, but these are few, and some of them filthy and entirely inadequate to meet the wants of the community. What are really required are large bathing houses, where only a small fee is charged. They might be floated in the bays and rivers, as they are in Paris and other places, where attention is paid to cleanliness. Such establishments properly built and conducted would not only be a strong inducement to habits of cleanliness, but also afford an opportunity for learning and practising the art of swimming. We would therefore desire to press upon our civic authorities the propriety of erecting such establishments, and have them in readiness for next summer. After the experience of the present season, we consider them wanting in their duty if they fail to make some adequate provision for the health, comfort and cleanliness of the community.

MEDICAL JOURNALISM.

There are 55 medical journals published in the United States. Forty-one of these are Allopathic, 9 Homœopathic, and 5 Eclectic. The circulation of the majority of these varies from 500 to 1,000, a

few from 1,500 to 2,000, and only two reach over 3,000 circulation, *The Medical Record*, semi-monthly, 3,726, and the *Philadelphia Medical and Surgical Reporter*, weekly, 3,500.

The circulation of the CANADA LANCET for the past year has been 1,500 per month, and for the present month (September,) the commencement of the new volume, it is 1,600. This we consider highly satisfactory, when we reflect upon the limited area in which we have to work, and we would take this opportunity of publicly thanking our friends for their kindness and liberality in aiding us by their contributions, and also financially in our undertaking. We have now established on a safe and permanent basis a medical journal, of which we as Canadians need not feel ashamed, and it is our intention to render it still more acceptable to our many subscribers. As an exponent of the state of medical science, and the independent organ of the profession in the Dominion, we are desirous of soliciting for its columns all that is of interest in medicine, and with a view to encourage this department we intend to devote more space to original articles, cases in practice, communications, and hospital practice. This we intend to accomplish not by omitting important and valuable selections; but by increasing the number of pages in each issue to the extent that may be necessary to make room for original matter. With this object in view the present number of the LANCET has been increased in all to 72 pages. More space will also be given to *Notes and Comments*, which will be made to contain a digest of our own reading during the month.

With this programme before us we enter upon the new volume, feeling confident from the support and encouragement we have received in the past, that our efforts will be crowned with success.

CHANGES.—Since our last issue our old cotemporary the *Canada Medical Journal* has ceased to exist, and in its place two new journals have been started—*The Canada Medical & Surgical Journal*, edited by Dr. Fenwick, the senior editor of the late *Canada Medical Journal*, and *The Canada Medical Record*, edited by F. W. Campbell. The editors have also assumed in addition to their editorial duties the responsibility of publishing their respective journals. The firm of Dawson Bros., were the publishers of the old journal. While wishing our new cotemporaries every success, we cannot help remarking with regret that it is a pity they should be so divided. There are at present 3 medical journals published in Montreal—The

two named above and a French journal, *L'Union Medicale*. This useless and unnecessary division but weakens their influence and will eventually make them a burden upon their projectors.

CANADA MEDICAL ASSOCIATION.

The meeting of the Canada Medical Association will be held in Montreal, on the 11th inst. It would be well for as many members from Ontario to be present as can make it convenient to attend. The contemplated medical act which was before the association at the last two sessions, will be up for final discussion. Those medical men who have not seen the amended act can obtain a copy by applying to Dr. H. H. Wright, of Toronto, who will be happy to send them one by return mail. This contemplated act, the principles of which have been already fully discussed in the columns of the *LANCET*, will no doubt form the principal topic of discussion, and we trust that it will receive its quietus from the association. In its present form it is exceedingly objectionable to the profession of Ontario.

DEAD BEATS.—“Publishers more than any other class of business men are imposed on by dead beats. We have several of this class on our books, who have allowed their subscriptions to run months and years, and then refuse to pay. We are now sending out bills to delinquents, and we intend to publish a list of those who have been receiving the Journal, and refuse to pay for the same, in order that other publishers may not be swindled by these gents.”

[We copy the above paragraph from one of our exchange journals, published on the other side of the lines. We have met with a few such cases in our own experience, and can fully sympathize with the writer in reference to this matter. There are on our list at the present moment the names of medical men, who have not paid one cent towards the support of the Journal since we assumed its management, in September, 1870. A strict adherence to the cash-in-advance system is the only true remedy for this state of affairs.]—ED.

HEGEMAN'S CORDIAL ELIXIRS.—We beg leave to call the attention of the profession to these elegant preparations, made by Hegeman & Co., New York. We have tried their elixir of Calisaya bark, in our own practice, and can speak confidently of its value in all cases of debility, especially where the stomach is in a delicate condition. The bark is deprived of its tannin and coloring matter, and when combined with pyrophosphate of iron, forms not only an agreeable, but a very efficacious tonic and antiperiodic. This firm does not deal in patent medicines in any shape or form, their business being confined to the manufacture of pharmaceutical preparations, &c. Samples will be furnished on application.—(See advt.)

NOTES AND COMMENTS.

DETERMINING THE SEX IN UTERO.—Dr. Hutton, (New York Med. Journal,) says that when the foetal pulsations are about 144 the child is a female; when about 124 it is a male. He mentions 7 cases in which he put this rule to the test and in every instance the prediction proved to be correct.

NATURE OF CANCER.—The latest views regarding the nature of Cancer are that it is not at first a constitutional disease; but purely local and that the system subsequently becomes affected by absorption of its elements. Early removal by the knife is therefore strongly recommended, and the subsequent use of caustics to the wound, chloride of Zinc, being the most serviceable.

CHOLERA REMEDY.—*New Remedies* for April, 1872, contains the following cholera prescription, a favorite one of Dr. Harts-horne, of Philadelphia: R. Chloroform, Tinct. opium, Spts. camphor, Spts. ammonia aromatic, aa f 3 iss.; Creasote, gtt. iij.; Oil of cinnamon, gtt. viij.; Brandy, f 3 ij. Mix. Dilute a teaspoonful with a wine glass of water, and give two teaspoonfuls every five minutes, followed by a lump of ice.

LIQUID NITROUS-OXIDE.—An apparatus has lately been patented in the United States by Johnston Bros., of New York, for holding liquid nitrous-oxide. It consists of an iron cylinder, 12½ inches long by 3 inches in diameter, into which one hundred gallons of the gas is compressed. When wanted for use the gas is drawn off in an india rubber bag provided with an inhaler. The advantages are, the facility with which it can be transported and the greater

purity of the gas. Dr. Sims lately used it in a case of ovariectomy, the patient being kept under its influence for an hour and a half.

IN-GROWING TOE NAIL.—The operation of removing the entire toe-nail as recommended by Dupuytren is barbarous and unnecessary. The better operation is performed as follows:—The point of a strong scalpel is inserted at the root and the nail divided its entire length, on a line with the ingrowing border, and this section dissected off, including the root. It is then dressed with lead and opium, and kept at rest for a short time. This is generally followed by a radical cure. (Clinic by Prof. Gross, Med. Times.)

FATAL CASE OF HYSTERIA.—Dr. R. W. Foss (British Medical Journal,) reports a fatal case of Hysteria. The patient when first seen by him was laughing and crying alternately, was perfectly conscious, and complained of the *globus hystericus*; in three hours afterwards she was dead. The *postmortem* examination revealed nothing to account for death taking place so suddenly, except a small clot of blood in the right ventricle, owing no doubt to syncope.

BLUE LIGHT AS AN ORGANIC STIMULANT.—From observations and experiments which have been lately instituted, regarding the effect of blue light on the system, it has been found to be one of the most powerful tonics and stimulants known in medicine. The application is carried out simply by removing every second pane of glass from the window of the sick chamber and substituting blue glass instead. It has been found exceedingly valuable in Typhoid Fever and debility from whatever cause.

MAIMING ESTABLISHMENTS.—It is stated that the police of London, Eng., have recently discovered an establishment for maiming children. In consequence of the rich reward reaped by beggars afflicted with deformities, parents are to be found so depraved as to hand over their children to be tortured and maimed for the sake of making money out of their deformities. The proprietors charge for maiming in proportion to the age of the children—for a child of one year old the sum of \$7 was charged for twisting the leg, and for a child 18 months the sum of \$10 for a similar operation. This is a striking commentary on indiscriminate almsgiving.

REDUCTION OF HERNIA.—Dr. Cooper Foster, surgeon to Guy's Hospital (London Lancet) says in regard to the reduction of strang-

ulated Hernia : Never attempt to reduce except the patient is under chloroform, so as to do away with all chance of muscular effort on the part of the patient. He says make one decided effort under chloroform and if it fail, operate ; forcible taxis and delay in operating are the great causes of death in all our Hospital practice. First comes the private medical man, he tries several times, then the dresser, then the house surgeon, the advanced student who may happen to be looking on, and lastly the surgeon is sent for. He considers the operation one of the simplest and easiest in surgery, and comparatively safe when done early.

CANTANI'S TREATMENT OF DIABETES.—The theory of Prof. Cantani, of Naples, regarding this disease is that it is not due so much to the increased formation of sugar ; as to defective combustion, owing to the introduction of a morbid form of glucose, which is incapable of being changed into Lactic acid, in the ordinary way. The heat of the body is therefore maintained at the expense of the albuminates and fats. He recommends in view of this theory the administration of lactic acid, and an exclusive meat diet. The Lactic acid is consumed at the Lungs, and this saves the albuminates and fats. This mode of treatment has been found more successful than any hitherto adopted.

BLINDNESS AND DEAFNESS FROM CEREBRO-SPINAL MENINGITIS.—Dr. Knapp, in the *Medical Record, New York*, gives an account of 41 cases of blindness or deafness, the consequence of Cerebro-Spinal Meningitis. Of these 31 were deaf in both ears, eight blind in one eye, and one blind in both. The eye affection is a form of purulent choroiditis, by which the various membranes are destroyed. The ear affection appears to be chiefly confined to the internal ear, and is said to consist of a purulent inflammation of the membranes of the Labyrinth. No disease of the middle ear could produce such decided deafness as these cases present. There is no discharge from the ears in the majority of cases, and the deafness is permanent. Of 24 cases of total deafness only one gave evidence of improvement. It was at first thought that the deafness was owing to destruction of the auditory nerve within the Brain, but subsequent investigation showed this not be the case.

JURY OF EXPERTS.—At the last meeting of the American Medical Association, a resolution was adopted recommending judges

before whom cases are to be tried, involving questions of medical jurisprudence, to appoint a "Commission of Experts" to collect and report on all the medical testimony and evidence presented, and report to the court. This would be a decided improvement. In many trials for mal-practice such a jury of experts would make short work of them.

SMALL POX.—This disease still prevails to a considerable extent in England, especially in the Country Towns and Villages. In London the return of the Registrar General reported no less than forty-three deaths during the first week in July. This represents a large number of cases.

We are happy to say that the epidemic has almost entirely subsided in Toronto. The few cases still in the Small-pox Hospital are convalescent, and there are no reports of fresh cases.

INVERSION OF THE UTERUS.—The August number of the *Buffalo Medical and Surgical Journal* contains a report of a successful case of reduction of an inverted uterus of *twenty-two years* standing, by Prof. White, of Buffalo. This is the tenth case replaced by that gentleman, and is remarkable for the length of time that has elapsed since inversion took place. The operation, which was obviously a difficult one, occupied an hour and a half. The patient did remarkably well. The operation, conducted in the manner described in the July number of the *LANCET*, was performed on the 23rd of June, and the patient was going about in a fortnight.

RATE OF MORTALITY IN DIFFERENT CITIES.—The death-rate of various cities of the world during 1870 is as follows, the figures indicating the number of deaths per every thousand of population; Montreal, 31.5; Liverpool, 31.1; Vienna, 29.8; New York 28.8; Manchester, 27.8; New Orleans, 27.58; Edinburgh, 26.3; Baltimore, 25.65; Chicago, 24.5; Boston, 24.55; Brooklyn, 24; London, 24; Philadelphia, 22.75; San Francisco, 21.57; St. Louis, 21.3; Cincinnati, 18.39, and Bombay, 18.2.

APPOINTMENT OF CORONERS.—Richard King, Esq., M. D., of Baillieboro, associate coroner for the united counties of Northumberland and Durham. R. H. Hunt, Esq., M. D., of Clarksburgh, associate coroner for the County of Grey.

Thos. B. Dack, Esq., M. D., of Creemore, Associate Coroner

for the County of Simcoe. Henry A. Kilborn, Esq., M. D., of Russell, Associate Coroner, for the united counties of Prescott and Russell. Thos. Kiernan, Esq., M.D., of Creemore, Coroner for the County of Simcoe.

MEDICAL AND SURGICAL REPORT OF THE TORONTO GEN. HOSPITAL FOR YEAR ENDING SEP. 1871.

Diseases, Accidents, &c., treated during the year.

Abscess,.....	11	Gonorrhœa,.....	6
Asthma,.....	3	Heart Disease,.....	7
Ascites,.....	7	Hysteria,.....	5
Apoplexy,.....	3	Hypertrophy of Os,.....	1
Anasarca,.....	3	Hemiplegia,	16
Albuminuria,.....	10	Housemaid's Knee,.....	4
Anemia,	6	Hemorrhoids,	6
Bronchitis,	7	Iritis,.....	2
Bubo,	2	Masturbation,.....	3
Balanitis,.....	1	Nævus,	3
Calculus Vesicæ,.....	7	Nephritis,	7
Caries,.....	7	Necrosis,	16
Chlorosis,	3	Opium Eater,.....	1
Concussion,.....	9	Orchitis,	4
Catarrh,	3	Oesophageal Stricture,.....	4
Cancer of Stomach,.....	4	Ophthalmia pur.....	10
Cholera Morbus,.....	6	Phthisis,	28
Cystitis,	6	Pneumonia,	13
Constipation,.....	28	Pleurisy,	4
Cancer,.....	9	Periostitis,	4
Dipsomania,	16	Psoriasis,	6
Delirium Tremens,.....	9	Pyolitis,	9
Dislocation,.....	26	Periostitis,	8
Diabetes,	4	Paralysis,	27
Debility,.....	14	Rubeola,	4
Dysentery,	5	Rheumatism,	36
Endocarditis,.....	1	Scabies,	9
Erysipelas,.....	8	Synovitis,	5
Eczema Rubra,.....	8	Syphilis,	15
Epilepsy,	7	Scarlatina,	3
Enlargement of Liver,.....	13	Tape Worm,.....	2
Epithelioma,.....	4	Tumors,	18
Fever Typhoid,.....	38	Urethral Stricture,.....	27
Fever Intermittent,.....	9	Ulcer,.....	26
Fistula in Ano,.....	6	Variola,.....	15
Fracture Simple,.....	19	Vesico-vaginal Fistula,.....	3
“ Compound,.....	6	Vicarious Menstruation,.....	6
“ Comminuted,.....	3	Varicose Veins,.....	8
Frost bite,.....	3		
		Total,.....	703

OPERATIONS.

For Calculus Vesicæ,.....	7	For Hemorrhoids,.....	6
“ Caries,.....	7	“ Nævus,	3
“ Cataract,.....	3	“ Necrosis,.....	16
“ Cancer,.....	4	“ Oesophageal Stricture,..	4
“ Dislocation, (reduction.)	26	“ Tumors,	18
“ Fistula in Ano,.....	6	“ Urethral Stricture,.....	27
“ Frost Bite,.....	3	“ Vesico-vaginal Fistula...	3
“ Fractures, (reduction.)..	28	“ Varicose Veins,.....	8

Patients are admitted to the hospital from all parts of the Province, on payment of 40 cts. per day, for a period of about three weeks, after which they are placed on the free list ; or a guarantee from the mayor of a city, or the reeve of a municipality, that the amount will be paid. Incurables are not admitted.

CORRESPONDENCE.

[To the Editor of the *Lancet*.]

On Wednesday, August 7th, I was called to see a little boy, about four or five years of age. Found him somnolent and complaining of very little pain when aroused. Had been ailing since Monday ; what pain he had, seemed to be in his stomach and head. There was a tendency to stretch the head far back ; conjunctiva suffused ; temperature of the body normal, or but slightly increased ; pulse from 100 to 120, and compressible ; tongue covered with a thin, whitish coat ; pupils rather contracted throughout the disease ; face but little flushed, and at times rather pale. I was told that the patient had always been in the habit of sleeping with the head back.

Thursday.—Patient still somnolent, but at times he became aroused and uttered a loud outcry, struggling with his hands stretched out, and feet thrown back. Pulse rose during the day to 144. Found considerable heat and some tenderness at the cervico-spinal region. The temperature of the head was but slightly higher than natural.

Friday.—Pulse down to 120. Bowels were moved by enema. Later in the day the pulse lowered to 108, and the child called for something to eat. Was fed some new potatoes at noon.—(Vide Flint's practice, p.p. 605, concerning remission of the symptoms.)

Towards evening the somnolence inclined to coma, which was occasionally interrupted by a loud outcry, and convulsive movements; the hands and feet thrown backward, and considerable struggling. The child on these occasions seemed to be in a state of terror or dread of something. Respiration became embarrassed with what appeared to be a collection of mucus in the throat. The patient inclined to vomit. At the suggestion of the parents, and with a view to dislodge worms if they should be present, a mild emetic was given, but nothing was vomited except the ingesta and a quantity of frothy sputa. The respiration became more and more obstructed, the coma more profound, and deglutition impossible. Pulse, as nearly as could be determined 192—and nearly imperceptible. The handle of a teaspoon was introduced into the mouth and a quantity of frothy sputa disgorged; and, at the same time, it was ascertained that there was no tonsillitis or diphtheritic exudation present. There were slight contractions of the muscles of the right side of the face; eyelids but partially closed, and eyeballs turned up so that a zone of cornea was constantly visible; marked oscillation of the eyeballs. These conditions continued throughout the next twenty-four hours; death occurring on Sabbath morning about six o'clock. There were no petechial spots on the body that I observed during the illness, but after death there was considerable discoloration of the cervical region and lower extremities. Opisthotonos was not well pronounced, but the tendency in that direction was somewhat notable. I regret that I could not get the thermometric indications for want of an accurate instrument, nor was an analysis of the urine made. No *post-mortem* examination was allowed. I could not make out any history of hereditary phthisis, but the scrofulous diathesis was sufficiently evident in the child. An unprofessional observer remarked that he thought him "consumptive." The child had been ill last year; with what *trouble* does not appear, the family having recently come to reside in this locality. The diagnosis made and concurred in by a medical gentleman who was called in consultation (but who thought the case at first rather obscure) was irritation of the meninges of the cervical portion of the spinal cord, and base of the brain either from tubercular deposit, or from the *materies morbi* which obtains in the disease known as cerebro-spinal meningitis. There has been no epidemic or other sporadic cases of cerebro-spinal meningitis in this vicinity. I may add that the treatment

consisted of sponging with tepid water, affusion of mustard water to the extremities, cold cloths and ice to the head and back of the neck, sinapisms and blisters to the throat and side of the neck, and internally, santoline and rhubarb, to ascertain if worms were present; Bromide of Potassium, Tr. Belladonna, and Tr. of Gelseminum.

I submit the above in order to obtain the views of some of those who have had more experience in the diagnosis of cerebral diseases.

I am sorry that I cannot submit the more scientific data of pathological investigation, but I have endeavored to give the symptoms faithfully.

Yours very truly,

C. W. REILLY, M.D.

Paisley, Ontario.

BOOK NOTICES, &c.

Lectures on the Principles and Practice of Medicine, in two volumes, by Thomas Watson, Bart. M.D. Fifth edition revised and enlarged, edited by Henry Hartshorne, M.D. Philadelphia: H. C. Lea; Toronto: Willing and Williamson.

We are glad to welcome the new edition of this favorite work on Medicine. When we consider the work involved in getting out so large a volume, we feel surprised that the author in his old age should have undertaken it. In looking carefully through the work we find new passages here and there, modifications of old opinions, and remodellings and amplifications, in all of which we recognize the master hand of the "McCauley" of Medicine. In the very first pages are evidences of the thorough revision the book has undergone. The first lecture contains much that is valuable to those commencing the study of Medicine. The lecture on Inflammation has not been materially changed, the author appearing to consider this subject as still *sub judice*. The lectures on Diseases of the Eye have been omitted. The lecture on Cholera has been largely rewritten and revised, and the author has adopted Dr. George Johnson's views regarding the nature and treatment of this disease. The lectures, which have been more fully reconstructed are those on dis-

eases of the nervous system, and these are fully up to the standard of modern research. In reference to the Pathology of Epilepsy he admits that anemia of the brain is the cause of the paroxysms, instead of the old theory of cerebral plethora. Aphasia, locomotor ataxia, embolism, &c., have also received attention. We have been much pleased and edified in reading the new edition of this valuable work, and we feel certain that it will be extensively and profitably read by a large majority of our subscribers.

A SYSTEM OF SURGERY, by Samuel D. Gross, M. D., L.L.D., D.C.L. (oxon) Prof. of Surgery, Jefferson Med. College, Philadelphia. Illustrated by upwards of 1,400 engravings. Fifth edition in two volumes. Philadelphia: H. C. Lea; Toronto: Copp, Clark & Co.

The first edition of this work appeared in 1859, and since then it has passed through five large editions. This of itself speaks better for the popularity of the work than any words we can offer. The present edition has been carefully revised and remodelled, and is fully abreast of the times, in all the modern improvements of surgical science. It is a first-class work on surgery, and no good surgeon can afford to be without it. It is impossible for us, with the limited space at our disposal, to do justice to the treatise before us. The work is eminently practical and exceedingly interesting, especially that part devoted to operative surgery. Part II, Vol. I. comprises special surgery or diseases of particular organs, textures and regions, embracing a wide range of subjects, the most interesting of which perhaps is disease and injuries of arteries, and aneurisms. The author has taken great pains with this part of the work, and has done it ample justice. Following diseases of the bones comes fractures and dislocations, and their appropriate treatment.

Vol. II. Treats of Diseases of the Head, Spine, Face, Eye, Ear, Nose, Airpassages, etc. Hernia is very fully entered upon, and also Vesical Diseases and Stricture. In short, there is nothing wanting to render it a faithful and complete guide in the treatment of all Surgical Diseases.

PHYSIOLOGY OF MAN—By Austin Flint, jr., M.D., Vol. iv. New York: D. Appleton & Co. Toronto: Willing & Williamson.

MANUAL OF QUALITATIVE ANALYSIS—By Robert Galloway, F.C.S. Philadelphia: H. C. Lea. Toronto: Copp, Clark & Co.

TEN LAWS OF HEALTH—By J. R. Black, M.D. Philadelphia: J. B. Lippincott & Co. Toronto: Willing & Williamson.

SUNSTROKE—By H. C. Wood, Jr., M.D. Philadelphia : J. B. Lippincott, & Co. Toronto : Willing & Williamson.

VACCINATION—By J. E. Coderre, Montreal.

AMNESIC AND ATAXIC APHASIA—By T. M. B. Gross, M.D., Louisville.

TRANSACTIONS OF THE MICHIGAN MEDICAL SOCIETY, for 1872. Lansing : W. S. George & Co.

MEDICO-LEGAL SCIENCE—By T. M. Stevens, M.D., Indianapolis.

ELECTRO-THERAPEUTICS—By A. D. Rockwell, M.D., Louisville.

OBITUARY.

It is our painful duty to announce the death of Dr. J. N. Agnew, of this city, which took place quite suddenly and unexpectedly, on the 15th ult., from cardiac syncope. Dr. Agnew has practised in this city for a number of years, and was favorably known as a careful and painstaking physician. He had not been in good health for some time past, but no one anticipated such a sudden change. He had been visiting his patients up to 4 p. m. on the day of his death, and on coming home complained of fatigue, and asked for a glass of iced milk. While this was being brought to him he expired. His death causes a vacancy in the representation of the territorial division of Midland and York, in the medical council of Ontario ; a position which he filled with considerable ability for the past three years.

Resolutions, expressive of his loss, and sympathy for his bereaved family, were passed at a special meeting of the medical section of the Canadian Institute, held on the 29th ult., of which he was an active member.

We have also to announce the death of Prof. Fraser, of McGill College, Montreal, which took place on the 24th of July. Dr. Fraser was very successful not only as a teacher of the Institutes of medicine, a position which he has held for the last 23 years, but also as a physician and surgeon. He was identified with every movement that had for its object the advancement of our noble calling. His death has left a blank which will not be easily filled up. As a lecturer he was clear, concise, and very comprehensive, and well liked by the students. His funeral was largely attended.

Dr. Blanchet, of Quebec, has also been called from his labors. His death took place on the 21st of July. At the second meeting of the Canadian Medical Association, which was held in Toronto, he was elected Hon. Secretary for Quebec. He was also re-elected in 1870 and 1871. He has been in ill-health for some time, although he continued at his post. He graduated at McGill University in 1863, and subsequently went to England. On his return he settled in Quebec, where he has practiced his profession with marked success, his amiable and gentlemanlike deportment gaining for him many warm friends who deeply regret his loss.

THE POWER OF COLD IN THE TREATMENT OF GONORRHOEA.—Dr. Gustave A. Shane, of Salem, Ohio, late of U. S. N. (*Med. and Surg. Reporter*), reports twenty-three cases of gonorrhœa which were quickly cured by the aid of cold—ice to the perinæum—and an alkali to secure its reaction upon the urine. Once he regarded, with others, gonorrhœa one of the most unsatisfactory and perplexing diseases to treat; but he now finds, if seen in the forming stages, no difficulty in subduing it in from four to ten days without any resulting gleet, chronic prostatitis, chronic irritability of the bladder, stricture, and such other sequences as followed the old copaiba and “*squirt-gun*” methods of treatment. When he treated this disease by the use of copaiba, cubeb, the terebinthinates and caustic injections—in the same number of cases, the maximum duration of treatment was one hundred, the minimum nine days, the average twenty-six, with six cases of the above-mentioned sequences.

Law Respecting Periodicals, Newspapers, &c.

1. Subscribers who do not give express notice to the contrary, are considered as wishing to continue their subscriptions.
2. If subscribers order the discontinuance of their periodicals or newspapers, the publisher or publishers may continue to send them until all arrears are paid up; and subscribers are held responsible for all numbers sent.
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No. 2.

Original Communications.

EXCISION OF NEARLY ONE HALF OF INFERIOR
MAXILLA.

BY J. LIZARS LIZARS, L.R.C.S., & L.M., EDIN: M.R.C.S., ENG., &C.

The late Professor Goodsir having directed my attention in 1848 to a foot note in an edition of Knox's Anatomy in which the operation for the removal of the Superior Maxilla (shortly before proposed by my late uncle, John Lizars of Edinburgh,) is looked upon as quixotic, my attention was thus early and forcibly drawn to the surgery of the jaws. I have, therefore, in studying the operations on the lower jaw, been struck by the almost unanimous testimony of authors as to the "facial paralysis," and the frequency of annoying and often long-continued salivary fistula, to obviate which must necessarily be an object of anxiety to the surgeon, and of the utmost importance to the patient.

Finding that the ordinary, yet standard text books on surgery (Gross, Erichsen, Miller, Pirrie, Holmes, &c.) all advise an incision more or less semilunar, viz., from the zygoma downwards in front of the ear to the angle of the jaw, and thence forwards as far as may be requisite, whereby both the portia dura and parotid duct *must* be

divided, (although in the 5th edition, 1872, of Gross, vol. 2, page 488, it is stated that, "By making the perpendicular incision in front of the ear ($\frac{3}{4}$ inch) there will be little danger of wounding the temporal or external carotid artery, and the trunk of the portio dura." 11th, 12th, and 13th line from bottom of page.) and paralysis of the muscles of expression and probably salivary fistula follow. I came to the conclusion that if the knife could be passed *below and nearly parallel* to the duct it would pass *between* the branches of the "pes anserinus," going to the upper and lower lips respectively, dividing merely the small anastomosing twigs, and at the same time by dividing the facial artery at a point where it would be reduced in size by the branches given off from it to the chin and lower lip, bleeding would necessarily be less formidable, and paralysis and salivary fistula completely prevented.

With this object in view, I applied to Professor Bethune, of Trinity College, who kindly furnished me with a cadaver on which to experiment, and having made one straight incision from the angle of the mouth towards the upper part of the lobe of the ear, as far as the posterior margin of the ascending ramus of the maxilla, I denuded the jaw of its periosteum, the masseter and that part of the temporal muscle attached to the outer and lower part of the coronoid process—using the handle of the scalpel principally. Extracted the lateral incisor and divided the jaw with the bone pliers, (the subject being young) then seizing the jaw at its cut end drew it upwards and outwards, thus facilitating the removal of the mucous membrane and muscles from its inner surface, and the division of the inferior dental artery and nerve and internal lateral ligament with the knife, and by keeping close to the bone I avoided the internal maxillary artery. The coronoid process and neck of the jaw being now free were divided with the pliers, and nearly the half of the jaw easily removed.

Having thus demonstrated the feasibility of this method of operating, I decided to put it in practice on a patient then under my care, a narrative of whose case I subjoin.

J. Niven, æt. 37, a native of Glasgow, Scotland. Has sandy hair and whiskers, blue eyes, florid complexion, and is well nourished. Suffered in youth from strumous abscess of the glandulæ concatenatæ, the cicatrices been still visible. After this he enjoyed excellent health until recently. Never had syphilis, and never mercurialized so far as he knows, though from his breath and the state of his teeth

and gums I believe he has. He first consulted me last summer on account of an enlargement of the inferior maxilla. The tumor was smooth and even externally, and extended from about one inch below the zygoma to a line perpendicular from the angle of the mouth; was slightly nodulated along the lower margin of the horizontal ramus, also along its inner surface, where by its projection inwards it pushed the tongue slightly to the right side and thus interfered with speech. The skin over the parts supplied by the mental branch of the inferior dental nerve was devoid of sensation, and the tumor was painless even under free manipulation.

Unwilling to submit the patient to so severe an operation as excision without an attempt to reduce the tumor by medication, I resolved to try the effect of the iodides, bromides, and counter irritants, but the tumor continuing to increase, I was at length forced to operate; consequently, on the 19th of February, 1872, the patient being thoroughly anæsthetized, assisted by Professor Bethune and two other medical men, I operated in the manner above described, using the handle (bone) of the scalpel and my fingers as much as possible. The proximal end of the facial and inferior dental were the only arteries requiring ligature; a few smaller branches being arrested by torsion. The wound having been swabbed out with a solution of carbolic acid, and exposed to the air till oozing ceased, was accurately adjusted, and the edges kept in place by silver wire sutures, pad and bandage.

The patient having recovered from the effects of the chloroform got into bed without assistance, and at once asked for food with a pretty clear voice. *From this time to the present (September, '72) he has had full control of all the muscles supplied by the portia dura.* In three days he was out of bed. In ten days the wound was healed with the exception of a small opening at its posterior extremity, through which saliva dribbled away for a few days, but was easily arrested by the application of nitric acid, after which the small opening rapidly closed. The flow of saliva must have been due to the division of some of the racimes of the anterior margin of the gland, or to some abnormality of the "solia parotidis."

The only other annoyance I had to deal with was a slight attack of erythema of the left side of the neck, and the formation of a couple of small abscesses at the seat of the old cicatrices above mentioned. The Tr. ferri. mur. externally, poultices and the lancet,

with tonics and generous diet, soon rid me of these, and the patient returned to his office one month from the date of operation, and is now engaged as a commercial traveller.

In describing this operation I have adhered as strictly as possible to what was done. I may now add that in cases where the bone is too dense to be divided by pliers, the chain, Hey's or the metacarpal saw can be used to divide it in whole or in part. Should it be necessary to disarticulate the condyloid process, the firm grasp of the lower part of the bone will enable the surgeon to draw it freely outwards, and thus let the knife keep close to the inner surface of the bone, and so avoid the masseteric artery and nerve. Again, should the tumor prove too large to be removed by the single straight incision, the surgeon has the option of making fresh incisions from any point of the first, either upwards or downwards as the exigencies of the case may require. One from the angle of the mouth downwards would I believe be the best, as it would divide the smallest number of branches of the facial nerve.

When the patient is a man, I can see no objection to this mode of operating. (I have shown Mr. N's case to medical men and others without their being able to notice any deformity, so fully does the whisker cover the cut.) In the case of a woman some may urge that the old line of incision would be less apparent. In reply, let me ask which is preferable; a simple scar across the cheek and full power of all the muscles of expression, or a scar which must show more or less a staring eye, a mouth dragged to one side and devoid of play, with probably a constant dribbling of saliva from one corner of it? I most firmly believe that every woman of ordinary sense would prefer the former.

Since the operation, I have been able to consult Heath and Guerin, and find that Beaumont of Toronto, and Huguier of Paris(?) have both operated by a *curved* incision from the angle of the mouth towards the ear, the latter ending his incision at the mastoid process. The direction of the curve is not given in Huguier's case—in Beaumont's the concavity was upwards—neither is the amount of paralysis noted; and all that is claimed is, that the eye lids were unaffected.

Trusting that the above case may be sufficiently novel and interesting to merit a place in the "Canada Lancet," and that I may yet hear of equally satisfactory results from the employment of this my method of operating, I commend it to your consideration.

Toronto, 7th September, 1872.

REMOVAL OF A CONGENITAL ANEURISMAL TUMOR.

REPORTED BY J. S. SCOTT, M.D., MALLORYTOWN, ONT.

On the first of March last, Mr. H. B———, æt. 30, Canadian, unmarried, called for advice with regard to the removal of an aneurismal tumor from his nose. The tumor was exceedingly hideous in appearance, was situated on the end of the nose, of a deep purple color, an inch and a quarter in diameter, and three-fourths of an inch in thickness. It was congenital, being present in about a proportional size at birth. The contents were evidently arterial blood, and could be returned to the arteries by pressure upon the surface. On removing the pressure the tumor would resume its full size instantly. Was without pain. Had been ruptured once by the falling of a limb from a tree, which nearly cost the patient his life from hemorrhage. The bleeding was restrained with much difficulty until the tumor healed, when it resumed its former characteristics. The patient lived in constant dread of an accident by which he feared he might lose his life. He was advised to have the tumor removed and to place himself under the constant care of a surgeon until the wound could be closed, and the danger from bleeding overcome.

Dr. Giles, of Farmersville, having given similar advice, it was arranged that he and the writer should take charge of the case, and that the patient should remain in Mallorytown for after treatment; on the 7th of March the tumor was removed without the administration of any anæsthetic. Pressure was kept upon the arteries supplying the tumor until the wound was dressed. Torsion of the arteries with the pressure of adhesive straps restrained the hemorrhage. The nose was kept in shape by a covering of sheet lead of proper shape, lined with layers of linen saturated with carbolic acid one part to five of sweet oil.

March 9th.—The straps were removed, cold water twenty parts to carbolic acid one part being dropped continually upon the wound. The linen was trimmed to the size of the wound and re-saturated with carbolic acid one part to five of sweet oil. Cold water dressing was applied occasionally to keep down heat, until the 13th, when the dressings were all removed.

14th.—Hemorrhage set in freely, but was restrained by pressure; adhesive straps over layers of fine linen saturated with carbolic acid and oil were re-applied. The use of the sheet lead was discontinued after the first dressing.

March 17th.—Patient having exercised too freely, bleeding set in profusely, but was controlled as before stated. From this date the wound was re-dressed every day. No farther accident occurred. On the 20th of April the dressings were discontinued altogether.

The wound was painted with carbolic acid, full strength, at every dressing. Portions of the tumor were left which delayed the closing of the wound. Strong sulphuric acid made no impression upon them, but a few applications of nitric acid soon removed them, after which the wound closed rapidly, leaving a well formed nose.

A similar tumor, situated on the lower portion of the forehead has diminished somewhat since the operation. It will be removed by the knife early the coming autumn.

Selected Articles.

SIR WILLIAM FERGUSSON ON STONE.

Sir W. Fergusson exhibited at Birmingham his collection of calculi, and in his address he said respecting it:—

Throughout my professional life I preserved any stone or bit of stone that I could secure as a trophy of surgery, and now I have the honor of laying before the present meeting of this Association between 300 and 400 specimens of this disease which have been dealt with by my own hands. Every now and then patients or their friends have insisted on keeping what might be deemed as hereditary personal property, and occasionally specimens have fallen aside; but on the whole, I must admit, that my patients or their friends have humored my fancies and given me free possession of the results of my surgical prowess. I exhibit the produce of between 330 and 350 cases of stone, personally treated by myself—about 200 by lithotomy, the rest by lithotripsy. The aggregate of stones removed amounts to nearly 500 in number. There may be others of my own time who can speak of larger numbers; there may be those who can show larger numbers of actual proofs of what they have done in this field

of surgery, and I see with pleasure the valuable contributions made in this direction, especially by Messrs. Gutteridge, Pemberton, Baker, Pracey, Bartlett, Elkington, Freer, and Jackson, which add largely in my estimation to the value of your museum display.

Most of these specimens were exhibited years ago at the Royal College of Surgeons, London, when I lectured on the subjects of lithotomy and lithotripsy, but the time for their display was so evanescent, that they attracted little attention, although at that date there was not a specimen of crushed stone by lithotripsy in the Museum. A feeling seems to prevail that there is no interest in a stone broken into fragments by the lithotrite, but if it has been cut into two by a saw, after its removal from the bladder, the cut surface is eagerly looked at. No doubt the interest here has reference to the chemical composition of stone, and possibly the nucleus, although the section does not invariably make that clear. In my estimation, the fragments in lithotripsy possess an interest equal, if not greater, in every respect to the cut or entire specimens. The chemical composition of a stone can be as readily made out from fragments as from sections; so also, as regards the nucleus; and, indeed, from these fragments we can often acquire a knowledge of a patient's constitution, as regards the tendency to the formation of stone, which we cannot in any other way. We can see how in some the fragments will lie in the bladder, without change of surface much longer than in others. In one case we can recognize for days, even weeks, the fragments of an uric acid stone with edges defined and surface the same as when first broken; in another, we perceive how readily and rapidly new stone deposit occurs—generally phosphatic. Then, too, we can speedily appreciate the danger of neglect or carelessness after lithotripsy is once begun, for, in place of probably only one stone being present, there may, indeed there will, soon be many stones, for each fragment becomes a nucleus for fresh deposit, and this hastens on with greatly increased rapidity. Even the nucleus, always a centre of interest, may be as appreciable in the fragments from lithotripsy as when displayed by the saw. It has happened to me in a case of crushing, in a female, to be struck with the appearance of redness in many of the fragments; and, on investigation of the mystery has been revealed on confession, that the patient had been in the habit of tickling herself with a stick of red sealing-wax, a portion of which

had broken off in the urethra and remained in the bladder. The fragments will be seen in the collection.

Again, I once was aware, in using a lithotrite in a male, that I had clutched something peculiar. On withdrawing the instrument, there was a black substance about an inch long between the blades. A surgeon present, who had been in charge of the case for years, immediately exclaimed, "Egad! this is the end of my gutta-percha catheter." A terrible revelation, for in the *interim* the patient had undergone prolonged treatment for chronic inflammation of the bladder, and had actually gone a voyage to Madeira in search of health.

I put as much faith as any man does in the chemical treatment, if I may so call it, of the diathesis of stone; but when once a stone has formed (and in most instances it is so without marked premonitory warning) the "fact" of stone is established, and there may be room for doubt whether chemical treatment does not then make matters worse; for, whatever the quality of urine, the chances are that a nucleus being present, deposition of stone will go on with increased rapidity, equivalent to the increase of size of the stone. That there may be exceptions to this rule, I admit; and there are two stones in my collection from one bladder, which are so smoothly polished by attrition that the formation of more stone had probably ceased for many months, if not years before they were removed.

I have referred, gentlemen, to the chemical treatment of stone in the bladder, chiefly for the purpose of ventilating a sort of heresy of my own—viz., that in our treatment of stone, and in our estimate of specimens of stone in our museum, the chemical composition has been improperly the feature most referred to as the one of the greatest importance. Stone in the bladder is essentially a surgical disease; it can be treated effectually only by the surgeon; and to him the size, or, I may call it, the circumference of the substance to be removed, possess the most engrossing interest, whether he looks to his own mechanical work or the safety of his patient; for I hold it as a maxim, particular in lithotomy, that the bigger the passage required for egress, the more difficult and the more dangerous is the operation. The *accoucheur* considers the size of the head, but does not trouble about its chemical qualities or composition. So should the surgeon the stone, both in regard to lithotomy and lithotrity.—
The Doctor.

THE FIRST EPIDEMIC OF CEREBRO-SPINAL FEVER IN MONTREAL.

By R. P. HOWARD, M.D., L.R.C.S.E., &c. ;
Professor of theory and Practice of Medicine, McGill University.

(Read before the Medico-Chirurgical Society on 3d. August.)

GENTLEMEN :—Having recently seen a few cases of a disease which, so far as I can learn, has never previously been observed to have prevailed in this city, and the affection being one of a most grave nature, I have thought it might be interesting, as well as appropriate, to draw the attention of the Society to the subject.

On the 3d April last I was called to visit a boy aged nine years, residing in St. Maurice street, but attending the Christian Brother's School in McCord street. He had been in good health until the morning of the 2nd April, when, on waking, he began to vomit. The emesis continued "off and on" all day, and the bowels moved twice. He also complained of pain in his head and stomach, and was heavy and stupid all day. He had the small-pox six years ago.

3d April, 11 a.m.—Temperature, 99 4-5° F. ; Pulse, 100. Is very restless ; throws himself about, and would fall off the bed if not watched. Very stupid ; can be roused, but then mutters rather than speaks, and moans and screams as if hurt ; resembles an intoxicated person who has not quite become unconscious. While head and body are hot, feet are cool. Tongue dry and red at point ; thin white fur over centre. On neck, chest, and body generally are found purple petechial spots of various sizes and unaffected by pressure.

Diagnosis.—Acute Purpura, but whether antecedent to Cerebro-Spinal Fever or Variola cannot decide. A severe epidemic of the latter now prevails.

To be wrapped in a blanket wrung out of warm water for four hours ; then to be rubbed dry. Two teaspoonfuls of brandy and 1-36th grain strychnia hourly.

5 p.m.—Temperature, 102°. Much warmer ; less stupid ; did not like the warm bath, and after three hours it was removed. Continue treatment.

4th, 10:30 a.m.—Temperature, 99 4-5° ; Pulse, 75, small, soft, occasionally irregular ; less restless ; complains a good deal of pain in

head, particularly forehead ; still grinds his teeth ; although drowsy he is less stupid looking and more intelligent ; pupils active ; conjunctivæ not injected ; no extra heat of scalp ; tongue moist, tip red, centre yellow-white ; vomited once this a.m., a yellow fluid ; thirsty ; one alvine discharge this morning ; many petechiæ upon either upper lid ; a few upon the face ; many over rest of surface ; cheeks flushed ; a red circumscribed swelling of about the area of a crown piece upon the dorsum of the right hand ; another as large as a sixpence upon the right instep, (these resemble the wheals of urticaria, but are not itchy) ; both forearms partially flexed, and tendon of biceps rigid ; forcible extension painful ; right hamstrings in same condition ; left not ; no retraction of head noticed ; mouth and lips in motion as if eating.

R. Potass. Bromidi, 3 ij. ; Potass. Iod., dr. i ; Ergotæ Ext., Fl. dr. iv. ; Digitalis Tinct., dr. iv. ; Aquæ Ad., ʒ vi. A dessertspoonful every two hours. Omit strychnia. Beef-tea, cold milk and barley-water as food.

5th, 10:30 a.m.—Has passed a sleepless day and night ; slept only in snatches till 4 a.m., when he became quieter and began to sleep longer and better ; has complained all day of pain in head and limbs ; rigidity affects both arms and both legs ; abdomen retracted, and its walls rigidly contracted ; head somewhat retracted ; no tenderness of spinous processes ; brows knit ; grinding of teeth persists ; temperature, 101° ; pulse, 84, unequal and irregular ; R., 20, regular ; retches but does not vomit ; small, liquid, yellow stool today ; moderate thirst ; petechiæ turning a dirty yellow, and fading as ecchymoses do ; a measly mottling along the right forearm ; some fresh wheals, scarlet-coloured ; one at base of right great toe, another near outer malleolus, a third over right patella, (these are all very *tender* but *not itchy*) ; two defined pink patches, not raised, upon dorsum of left foot ; a similar long red patch along radial border left forearm and thumb ; one, slightly raised, the size of a sixpence, at base of right thumb.

Continue mixture ; bladder of ice to vertex ; another to nape of neck ; Unguentum Belladonnæ to be rubbed down the spine every three hours.

6 p.m.—Temperature, 100 4-5° ; Pulse, 108 ; R., 32 ; face more flushed ; purpuric spots fading rapidly ; intercostal muscles seat of tonic spasm.

To have a dose of chloral-hydrate if unable to sleep.

6th, 10:45 a.m.—Rested well all the evening and most of the night, and had but little delirium; much more collected and rational; is more conscious of his trifling ailments, and complains that his tongue is sore. This is due to a collection of aphthæ along the border of the tongue, which resembles a patch of herpes; petechiæ almost gone; wheals fading and reducing in circumference; those on left foot, which are the latest, are almost gone, and one has a yellow colour like a fading bruise-stain; temperature, $100\ 3\text{--}8^{\circ}$; pulse 120, small and firm; R., 28; tongue moist, borders red; yellow-white fur on centre; no emesis nor alvine discharge; urine high-coloured; deposited lithates; not tested for albumen.

Countenance open and less distressed looking; knitting of brows gone; less retraction of head; tonic spasm of other parts as before; about the flexure of the right elbow and anterior aspect of right forearm, are numerous red, congested patches, not unlike the exanthem of measles; the general appearance of the forearm reminds one of the "subcuticular rash" of typhus; puffy swelling of both elbow-joints, most marked over head of radius. Continue treatment.

7th, 9:30 a.m.—Cried so much last night from pain in the head that a dose of chloral was given, and in a few minutes he fell asleep and slept till 5 a.m.; is now perfectly sensible and somewhat cross; no trace of petechiæ; several of the red blotches still visible, but very pale; a new one not elevated upon face; slight effusion into left knee-joint, and considerable swelling of right foot, chiefly of dorsum.

In lifting him off the bed this morning his father found his body quite stiff; spasm of the flexors continues, and slight retraction of the head; bowels moved to-day; passed urine in the bed last night; temperature, $103\ 2\text{--}5^{\circ}$; pulse, 126. Continued treatment.

8th, 11 a.m.—Slept well till 3 a.m.; slight nocturnal delirium; perfectly rational now; pupils active and of medium size; no dislike to light: pain in neck, with retraction of head; spasm of flexors continued; red patches all gone, except one which appeared upon cheek yesterday; right knee and left hip painful; two formed stools; urine abundant; pulse, 118.

9th, 11:30 a.m.—Temperature, $102\ 4\text{--}5^{\circ}$; pulse, 120; slept well, without delirium; cervical pain and spasm, and pain in the

head continue; three herpetic vesicles upon ulnar border of left thumb; less swelling of joints; one alvine evacuation; don't like the ice application.

Continue mixture. Hydrag. C. Creta, gr. iij.; every four hours.

10th.—A good night; temperature, 102 1-5°; pulse, 120; less retraction of head, but spasm of flexors continues; swelling leaving the articulations; tongue cleaning rapidly; a liquid stool this a.m.; epistaxis in the night.

11th.—Another good night; perspired freely yesteday; temperature, 101 3-5°; pulse, 116; no retraction of head; hamstrings and bicipital tendons somewhat tense; still some effusion into both elbows and left knee; clean moist tongue. Omit gray powders, of which he has taken nine. Continue mixture.

12th.—Slept well; temperature, 100 4-5°; pulse 118; tongue a little coated; very little tension of tendons; right elbow more swollen and painful; lays chiefly on right side. Continue mixture, which has been given very regularly during sleep.

14th.—Continued and rapid improvement since; appetite very good.

16th.—Found at the hall door in his night shirt. He had been brought down to the parlour, and hearing a noise at the door, tottered to it to see what was going on. His convalescence was complete and rapid.

This was the first case of so-called "Epidemic Cerebro-Spinal Meningitis" I had ever seen, and appeared to be an example of what had been called the "purpuric" variety, the "Malignant Purpuric Fever" of Stokes. Very soon after, on the 15th May, I had an opportunity of seeing, with Dr. Gardner, in the West end of St. Joseph street, a second case very like the one just related. The subject, a boy aged ten years; the seizure sudden, while in good health; the leading symptoms, early vomiting, pain in head without much heat of scalp, delirium, cerebral oppression, early appearance of petechiæ, then retraction of head, rigidity of posterior crural, abdominal and thoracic muscles, effusion into one ankle-joint, followed by comatose and typhoid symptoms, and death in the eighth week.*

On the 26th of the same month, in consultation with Dr. Fuller,

* This and a second case was admirably reported by Dr. Gardner at the same meeting at which this paper was read.

a third case of the disease came under observation; this time three miles beyond the city proper, and upon the Lower Lachine road. It resembled, in most of its features, the two cases already described. A healthy boy, between eight and ten years old suddenly seized with severe illness, early emesis, pain in the head without great heat of scalp, more or less stupor, then retraction of the head, and severe pains in different parts of the body, but neither cutaneous extravasations nor articular effusion. This case recovered.

Strange to say, on the same afternoon Dr. Bessey asked me to see, in Fortification Lane, near St. Peter street, a boy of about ten years of age, who had been quite well on the 24th May, and was suddenly seized, on the 25th, with signs of collapse, cold surface, sunken eyes, rapid small pulse, cyanotic aspect. These symptoms were followed by those of reaction, attended, however, with convulsions, delirium, restlessness and more or less stupor. He had been ill about twenty-four hours when I saw him with Dr. Bessey. He then exhibited all the symptoms of profound collapse, combined with incessant restlessness, jactitation, delirium, and more or less stupor. Death ensued the same evening. It appeared to me to be an example of the third variety of the disease described by Radcliffe, the "Fulminant" form. I don't remember whether any spots existed on the surface of this fourth case.

I have mentioned these cases seen with my colleagues only with the view of proving that the disease is truly the so called "epidemic cerebro-spinal meningitis," as they afford examples of two of its three recognized varieties. I hope they will themselves state to the Society the features of their respective cases.

All the subjects of the preceding cases, you will have noticed, were boys between eight and ten years of age, but on the 20th June I was requested to visit, in Ottawa street, a female child twenty months old, of whom the following history was elicited: In good health till 8th June, when it appeared less lively than usual; dull and drowsy on the 9th, but not feverish; soon vomiting set in with fever, and then general soreness of the surface, so that the child cried when moved; during the first week the child frequently put its right hand to its head. No eruption on the skin was noticed, and the mother attributed the symptoms to teething.

When seen by me on the 20th, the child was in the following

condition : Appears stupid and helpless ; unable to sit up ; pupils large and fixed ; sclerotic uninjected ; strabismus, with oscillation of eyeballs ; moderate retraction of head ; skin presents a peculiar, light scarlet blush, from capillary injection ; a scratch is soon followed by a line of deeper redness, as if the capillaries had become suddenly enlarged ("tache cerebrale") ; no rigidity of extremities ; face pale ; features vacant.

The retraction of the head had been noticed first on the 16th. The emesis has not returned ; bowels move once or twice daily ; urine is passed in bed ; pulse small and feeble—120-130.

To have beef-tea, a teaspoonful of wine hourly, and the following mixture : *R.* Potass. Bromidi, *dr. ss.* ; Potass. Iodidi, *dr. i.* ; Digitalis Tinct., *dr. i.* ; Syrupi Aurantii, $\frac{3}{4}$ *i.* ; Aquæ ad., $\frac{3}{4}$ *iv.* A teaspoonful every three hours. An ointment of the Red Iodide of Mercury, with Extract of Belladonna, to be rubbed down the spine every four hours, and if scalp grows hot, ice to be applied.

21st.—Rigidity of legs set in yesterday afternoon and continues at intervals to-day ; left great toe is extremely extended at times ; no herpes nor articular swelling ; slept in snatches last night ; head not particularly warm ; pulse, 150—weak, small, and irregular. Continue treatment.

22nd.—General tetanic spasms seized arms and legs yesterday, and have recurred at intervals since. In these attacks, the back, arms and legs became rigidly extended ; the feet extended and adducted ; the left hand clenched and pronated ; pulse very small and frequent ; child cannot last long. Death ensued during the night.

There is some room for question as to the true nature of this case, but I have myself no doubt that it was not an example of that common affection Tubercular Meningitis. It may have been an instance of that comparatively rare disease of which I have seen a few cases, Sporadic Cerebro-Spinal Meningitis ; but, in view of the recent occurrence of several cases of "Epidemic Cerebro-Spinal Meningitis," it is not improbable that it was an example of the "Simple" form of the latter affection—that in which purpuric symptoms are wanting.

As to the *nature* of this so-called "Epidemic Cerebro-Spinal Meningitis," the opinion now generally held by pathologists, that it is a peculiar form of fever and not merely a local inflammation ; is

probably correct. For, first, the circumstance that there are varieties in the disease, in one of which the constitutional symptoms are so intense that they may destroy life before the local lesion—the inflammation of the cerebro-spinal membranes—has been developed, places this febrile affection among those well-known Fevers, Typhus, Enteric Fever, Scarlatina, Variola, &c., in which, occasionally, the same malignancy is observed, and the vital powers are overwhelmed in a few hours, before time has elapsed for the evolution of the disease. Secondly, the suddenness and violence of the invasion; the profound prostration of the nervous system at the outset, in severe cases, as shown in the pale cold surface, the feeble pulse and heart's action, the intense restlessness, peculiar stupor and the delirium; and the daily occurrence of purpuric symptoms, in some cases, render it highly probable that some morbid agent, some specific fever poison has entered the system.

Such is the case in malignant small-pox, for example, in which, together with similar prostration of the nervous system, there is a marked tendency to the occurrence of purpuric symptoms at the invasion of the disease and before the appearance of the characteristic eruption.

Previous to the appearing of this cerebro-spinal fever amongst us, the manifestation of purpuric symptoms at the *outset* of a febrile disease has, in my own experience, nearly always indicated the existence of variola, and I do not know any mere inflammatory disease in which purpuric symptoms occur *early*. That cerebro-spinal fever resembles, in these respects, small-pox, is a strong argument that it is also a zymotic disease, caused by a specific poison.

Thirdly, The same view is supported by the circumstance that in some cases of the disease no lesion of the nerve centres or their coverings is found after death; which seems to prove that the local affection is not essential, although it is usually present.

Fourthly, Its epidemic character supports the same view, for most, if not all, epidemic diseases are now held to originate in a specific febrile poison.

Fifthly, There are facts, not, perhaps, of an absolutely conclusive nature, tending to show that cerebro-spinal fever is occasionally communicable from the sick to well person, just as cholera is; and these facts, as far as they are reliable, favour the idea that the disease has its own specific poison, like all other specific fevers.

Sixthly, The existence of well marked signs of inflammation of the meninges of the brain and cord, and of those centres themselves, is not opposed to this view ; for it is quite in harmony with what is known of other fever-making poisons to suppose that in this affection the poison has a special action upon the nerve centres and their coverings, just as the poison of whooping cough upon the pneumogastric nerve or its centre. Indeed, it is only upon the supposition that some specific poison has produced a specific form of disease that one can explain the epidemic prevalence of inflammation of the cerebro-spinal centres ; primary or idiopathic cerebro-spinal meningitis, in healthy persons, being of so rare occurrence, if it occur at all, that the pathological doctrines of the day deny its existence. Sporadic inflammation of the membranes of the brain and cord is a rare affection, and originates either as a manifestation of some fever, such as typhus, or variola, or pyæmia, or of some constitutional disease, as syphilis, gout, rheumatism or tuberculosis ; or is secondary to some local lesion, such as injury or disease of the bones, effused blood, tubercle, and morbid growths, &c.

I have nothing to say from personal experience respecting the best method of *treating* the disease. From the varying but always high mortality of the several epidemics recently witnessed in the United States and in Continental Europe it may, I fear, be inferred that we possess little power over the course of the disease.

Recognizing the disease as a FEVER, modern experience suggests, if I am not mistaken, that the province of the physician *quo-ad* its treatment is to *guide*, not to drive it to a favorable termination. Before the audience it is unnecessary to discuss the general principles upon which this, in common with all fevers, is to be treated ; but as in typhoid fever or scarlatina, for example, there are certain special indications to be fulfilled ; so there are in cerebro-spinal fever, and upon these I will offer a few observations.

The main, special indication appears to be, to lessen the severity and prevent the extension of the inflammatory process, engaging the cerebro-spinal membranes and, more or less, the centres they enclose.

The testimony in favour of the local application, at the outset, of ice to the head and spine, short of producing over-depression, is stronger than of any other remedy. If there exist much prostration, external heat is to be applied by bottles of hot water, bags of hot

salt or oats, warm flannel bandages, &c., during the employment of the ice and subsequently.

A difference of opinion obtains as to the value of the local abstraction of blood by leeches and cups applied behind the ears and to the nucha.

During the epidemic observed in 1865 by Dr. Burdon Sanderson, upon the Lower Vistula, "free local bleeding during the first few hours, while the patient was still vomiting, occasionally produced the most striking results." And in the Philadelphia epidemic of 1866 Dr. Stillé states that cupping the nape of the neck, in the more sthenic cases, was of "essential service in mitigating, and generally, indeed, in wholly removing the neuralgic pains" of the disease.

The Germans, of whom the late Niemeyer may be taken as a fair representative, employ calomel in frequent doses, much in the same way as it has usually been employed in sporadic meningitis; and, however unfashionable it may be, I own to the view that it is likely to be useful, if not in limiting the quantity of the inflammatory products, in promoting their more speedy removal.

While giving the calomel the other remedies should be faithfully employed. It is right to add that English and American physicians, as a rule, do not advocate mercury in the disease.

Antipyretic doses of quinine, at the very beginning of the disease, have been faithfully reported upon by a Committee of the American Medical Association. As, however, the testimony respecting this means is quite conflicting, it may be that when the disease obtains in malarious districts quinine may really prove useful. And I may mention in this place the interesting circumstance that, in Mr. Burdon Sanderson's opinion, malaria was one of the only two local conditions (the other was a cold climate) which appeared, probably, to have had some share in determining the preference of epidemic meningitis for the two localities in which it manifested itself most severely about the lower Vistula.

Of course, large doses of quinine may be occasionally useful when the pyrexia is very high, but then it is used, as in other fevers with hyperpyrexia.

Stillé and other American physicians, and some Germans, notably Ziemssen, think highly of opium in the early stages, given in moderate doses (1 gr.) every hour or two, according to the severity

of the case; and Burdon Sanderson testifies to its value "after the initial symptoms had subsided." The indications for it are: restlessness, sleeplessness, maniacal delirium, pain and spasm. I cannot help thinking that chloral hydrate and bromide of potassium will be found equally useful and quite as safe for the same indication.

Not the least important point of the management of the disease, in my opinion, consists in the maintenance of the vital power by judicious feeding and, when the symptoms require them, by the administration of stimulants.

Further experience is needed as to the value of a combination of the iodide and bromide of potassium with ergot, as well as of Calabar bean, which is the latest remedy that I have heard of. The last named agent, owing to its power of diminishing the reflex power of the nerve centres and, perhaps, suspending the conductivity of the motor nerves, may be expected to prove useful in allaying the painful spasm of the muscles.

It is a matter of much interest to myself why a disease which appears to have been observed, but not separated from other fevers, in Europe, either in particular countries or widely diffused ever since the fourteenth century; which was first recognized in the United States and some parts of Canada in the beginning of this century; and which has continued to recur from time to time in various localities, and frequently over very large areas in the neighbouring Republic; which of late years has been seen in the Eastern Townships and at Ottawa, and which during the past winter has been prevailing in the City and State of New York, in Chicago and Detroit, Indianapolis, and in some parts of western Canada, should have visited our city now for the first time, or should be now recognized by us for the first time. In our present ignorance of the etiology of the disease I can offer no sufficient explanation of its manifestation amongst us this Spring. Let it be noted, however, that there has been an unwonted prevalence of zymotic diseases in epidemic form during the past winter. I need not mention the wide diffusion of small-pox and the unusual prevalence of erysipelas and puerperal fever, and the extensive epidemic of measles.

It is a pleasant reflection, however, that this fatal disease, "cerebro-spinal fever," as a rule, is limited in its outbreaks to a small section of a population, and, unlike cholera, has not a marked tendency to be diffused far and wide along the great lines of communication in a country.—*Medical and Surg. Journal, Montreal.*

BRITISH MEDICAL ASSOCIATION.

The 40th annual meeting was held at Birmingham last month. President, Mr. Alfred Baker, Senior Surgeon to the Birmingham General Hospital.

PRESIDENT'S ADDRESS.

Mr. Baker, after welcoming the visitors to Birmingham, said : " Situated at the north-western extremity of the county of Warwick, forming most probably a part of the old forest of Arden, Birmingham is built on the eastern slope of three undulating hills, on the banks of two streams, the Rea and the Tame. and is one of the highest towns in the kingdom. All the approaches are by ascent excepting that from the west, where the highest point of the borough is reached. This spot, at the top of the Hagley road, is 617 feet above the sea-level, whilst the lowest point, at Saltley, on the east, is 288 feet. Between these extreme points, the ground-level of St. Philip's Church, in the centre of the town, is 462 feet, and that of King Edward's School, in which we are assembled, is only thirty feet lower. The absence of any dominant hill surmounted by a lofty public building prevents these elevations from being realized at a glance, but the height and the undulations in surface may be inferred from the fact that most of the streets pursue a diagonal course, so as to lessen the declivities. The ground is naturally poor, in an agricultural sense, and consists of sand, gravel, and clay. The substratum is of new red sandstone, which passes from the river Tees southward to Birmingham, and thence northward to the Mersey. The southerly and oldest part of the town, running from High street to Deritend by a deep descent, is the lowest and dampest portion. It is here crossed by the river Rea, and has much clay in the subsoil ; this clay extends up the valley of the stream to Sparkbrook, and ceases only at Moseley, which has a higher level and a sandy subsoil. From the conformation of surface and the character of the ground, it is clear that Nature has supplied every requisite for surface drainage into the streams, and for the rapid percolation of storm-water through the porous subsoil ; hence floods are rare. In former times, as the late Dr. Darwell told us in the *Medical and Surgical Reporter* of 1828, after heavy storms or unusually wet

seasons, Deritend, in the neighborhood of the Rea, was liable to inundations ; but this evil is now rectified by the strengthening of the banks of the stream, by the interception of the current for manufacturing purposes, and by the erection of bridges. In order to render the drainage of the town more perfect, a system of deep artificial sewers has been designed and nearly completed."

Mr. Baker then described the drainage and water supply of the town, alluded to some of its chief manufactures, its objects of interest, and its history, coming finally to its long array of names eminent in all departments of knowledge from the time of Boulton the engineer, which was, he said, " the Augustan era of Birmingham. Taking only the eminent men who constituted the Lunar Society (so called from their meeting when the moon was at its full and would facilitate their travels), it may be said that few towns could boast such an array of remarkable talent and capacity. The names of Boulton, Watt, Withering, Priestley, Galton, Keir, and Berrington are sufficient to prove the assertion ; and Mrs. Schimmelpenninck describes each member as being ' the centre of intellectual friends ' who frequented the meetings, and added to the depth and brilliancy of their discussions. The mention of Sir W. Herschel, Sir Joseph Banks, Dr. Solander, and Dr. Afzelius, as frequent visitors, is a sufficient stamp of their intellectual calibre. In this town also Dr. Roebuck introduced the use of the lead chamber in the production of sulphuric acid as a substitute for the two old methods of burning sulphur under bell-glasses, or distilling sulphate of iron at red-heat. By this improvement he rendered the process continuous, increased the power of production, and reduced the cost. The value of his discovery may be estimated when it is remembered that sulphuric acid is essential to all the metal trades, and that without it the present gigantic works for the production of alkali and artificial manure could not exist. Whilst ready to welcome and adopt strangers, Birmingham has not always appreciated the genius of her children, but has presented herself at times as a stern step-mother. The populace, whilst thoroughly loyal, orderly, and law-abiding, and usually tolerant in spirit, has been betrayed at times by misconception and misguidance, into transitory tumult and violence. The two subjects—Politics and Theology—inseparable in this country—have rarely borne a free discussion without leading to more human passion and unrighteousness than all other sources of difference to which we are ex-

posed. Against this we appear to have no protection. The *odium theologicum*, once fulminated, recognises no genius opposed to its own narrow doctrines, and is antagonistic to that spirit of inquiry by which human progress has been promoted and a higher stand-point reached. To this may be ascribed the terrorism which prevailed in 1791, when Priestley, the philosopher, chemist, and scientific inquirer—when Baskerville, the greatest printer that England has produced, the founder of the most perfect type known, whose edition of the Bible is sighed after by bibliographers, whose exquisite productions of the ancient and modern classics, and of William Hunter's work on the Uterus, are considered to be treasures of the typographic art—were, with other citizens who did not conform to the views of the mass, persecuted relentlessly by the destruction of their house and property, and they themselves narrowly escaped the *auto-da-fe* of a popular, though unreasoning Inquisition. It is lamentable to think that a reflective and accomplished inquirer, whether right or wrong, was driven by a bigotry and intolerance to seek a home for his later years of life beyond the far Atlantic, and that a type so fine as that of Baskerville, employed by him in the diffusion of the highest knowledge—the divinest revelation vouchsafed to man—should have found its last resting-place in a faubourg of Paris, its first duties in spreading the sophistries of Voltaire. The Medical annals of this town furnish a full list of distinguished men. The philanthropic Dr. Ash, who founded the General Hospital earned the highest local fame. Failing health caused his removal to London, where he was made a Fellow and Censor of the Royal College of Physicians. Dr. Witherington, his immediate successor, was widely known by his botanical publications. He lies in the parish churchyard of Edgbaston, close to the hall in which he passed many years of his life. Dr. Male, highly esteemed as a sound physician and most honorable man, rested his literary fame upon his "Juridical Medicine." To say that Dr. Edward Johnstone was a highly-cultivated physician; that his brother John—your president in 1834—was an accomplished scholar, an intimate friend of Dr. Parr, with whom he sympathised in classical lore; and that Dr. James—the president of your last meeting here—won esteem by his acquirements, his courtesy, and his kindness, would be a work of supererogation to the older members of this society. Whilst paying merited honor to our physicians, it is due to the surgeons of the

town to state that the literature and practice of our art have been ably represented by those who have preceded us. George Freer, a surgeon to the General Hospital, was the first who successfully applied a ligature to the external iliac artery for the cure of femoral aneurism, as suggested by Abernethy. From the study of this and other cognate cases, his pupil, the late Mr. Joseph Hodgson, probably derived the bias that led to that admirable memoir, 'On the Diseases of Arteries and Veins,' which secured the Jacksonian prize of the Royal College of Surgeons, became a surgical authority, and secured for him that character for sagacity and judgment that he subsequently enjoyed. More recent Jacksonian prize-men may be named. My colleague, Mr. Crompton, earned this distinction by an Essay on Diseases of the Tongue; the late Frederick Ryland by a valuable Monograph on the Throat and Larynx; and Mr. John Clay by a Treatise on Ovarian Disease. It is to be regretted that the essays of Mr. Crompton and Mr. Clay have remained unpublished. To extend the list would—if I have not already earned the rebuke—be tedious. I will content myself, therefore, with saying that our profession yet numbers members who will not suffer the reputation of Birmingham surgeons to decline from its achieved position. Having referred thus briefly to the older officers, who were necessarily connected with the General Hospital as the only large Medical charity in existence, I must now be permitted to say that examples nobly set have been zealously followed, and that a variety of institutions, secondary perhaps in scope, but paramount in popular interest and sympathy, have been established amongst us. The Queen's Hospital, founded by William Sands Cox, in connection with the Queen's College (which it was his dearest object to convert into a great Midland University), graced by the favor of Royalty, and approaching in magnitude to its elder sister, competes with it for support. The General Dispensary: the Midland Eye Hospital, founded by Dr. De Lys and Mr. Hodgson; the Hospital for Sick Children, so eloquently advocated by Dr. Heslop; and a Special Hospital (recently established) for Women—appeal, and not in vain, to the sympathy of contributors. A Sanatorium is in course of erection, designed to furnish ample space, the most perfect hygienic arrangements, and life-giving air from the breezes that play over the hills of Blooms Grove Lickey. This will form an adjunct to all the Medical charities, and will be suited to invigorate frames that have

been exhausted by disease, and are unfitted to encounter the evil influences of a close residence in a polluted atmosphere. Under the auspices of my friends, Dr. Fletcher and Mr. Kimbell, an institution has been founded at Knowle for the treatment of imbecile children upon the principal of the Earlswood Asylum. From the adaptation of a cottage to the wants of a few inmates, they have so completely established the benefits that may be conferred upon these piteous claimants for human care and benevolence, that the sympathy and co-operation of the wealthy have been secured, and a noble building has been commenced, which promises to administer adequately to our local necessities. With regard to the establishment in which we are assembled, it is, architecturally and educationally, one of the brightest ornaments of the town, Originating in the wise consent of a youthful king to a petition from the inhabitants of Birmingham, a small annual grant, devoted by pious men to the Convent of the Holy Cross, after the dissolution of these monastic institutions by Henry the Eighth, was granted for educational purposes, and formed an endowment for this school.

The value of the lands thus bestowed has increased a thousand-fold, and the income has in course of time become regal. Regarded as a school for imparting a classical and general knowledge, it has amply fulfilled the intentions of the founder by securing to the young a liberal, scholarly, and often an university education. Its past history is full of bright associations ; and whatever modifications in its course of instruction may be needed to meet the wants of the present age, it has deserved well of the past generations. You will share with me in an expression of deep regret that personal illness has prevented our associate, Dr. Fleming, from delivering the address in medicine, and from taking that prominent part in this meeting which he was invited to assume by your Council, and for which his literary and practical requirements and his known accuracy so peculiarly fitted him. We must all lament that the voice which advocated this town as your place of annual meeting will be heard no more. The energy and fervour of Mr. Clayton's manner, his singular conversance with the affairs of the Association, and his judicious advice in its management, will be missed by the active members ; whilst we, his intimate fellow-workers, regret the loss of one possessed of great perceptive and executive ability, and endeared to us by many estimable personal characteristics. Other hands, how-

ever, will be extended in friendship and brotherhood; other voices will proclaim our hearty appreciation of your visit. As the representative of the Birmingham and Midland Counties Branch of the Association, and in the name of the whole Profession of the district, I say to all our visitors, Welcome! welcome! thrice welcome!"
—(*The Doctor.*)

ADDRESS IN MEDICINE

BY SAMUEL WILKS, M.D., F.R.C.P., F.R.S.,

(*British Medical Association.*)

With regard to our general notions of disease, I consider that during the last few years, our opinions have made a rapid advance. I naturally take the period during which I have been in the Profession, and reflect upon what was implanted in my own mind by lectures and by books twenty-five years ago. Of course it is necessary to remember that, as our ideas are matured, there is a great liability to transfer one's own earlier and cruder notions to the teachers whom we misunderstood; but, allowing largely for this explanation, I cannot but think that the last twenty or thirty years of pathological progress must have made material alteration in our general opinions regarding disease. For example; a common method of teaching was by the description of acute inflammation occurring in healthy subjects; but the disappointment I felt in common with other students, in not seeing these cases in the wards of the hospital, soon convinced me that something was wrong. We saw abundance of chronic disease, occasionally an acute affection; but this was generally patched on to some other chronic disorder; so it soon became evident that, with the exception of acute affections of the chest due to the vicissitudes of weather, an acute inflammation occurring in a healthy person was the rarest possible occurrence. Morbid anatomy has been mainly instrumental in making the discovery; and, in fact, this could not have been reached without its aid, since apparently sudden and fatal illnesses were constantly occurring in persons of previously good health. It is true, for example, that persons died of acute peritonitis, and, without *post-mortem* examination, the cause was attributed to that universal evil, cold; but

inspections have now invariably disclosed some old and long latent mischief in an organ which lighted up the fatal attack. To suppose that a healthy person can suddenly have an acute arachnitis or acute peritonitis, may, perhaps, involve an actual pathological absurdity. Even the acute inflammation of the chest occurring in healthy persons under the aggravated causes of wet and cold, is far less common than is generally supposed. When, many years ago, a paper was read at a medical society advocating the early treatment of acute disease lest it should become chronic, I took the opportunity of remarking that an opposite suggestion might have been with more propriety advanced—viz, the advantage of arresting chronic processes lest they should become acute. There are far more acute diseases carrying off chronically diseased people, than there are chronic diseases which have had their origin in acute affections. What we might more advantageously direct our minds to, are the insidious and slow-working changes in the organs and tissues, to see if we can grasp these in their beginnings and check them at their source ; what we are too often asked to do, however, is to arrest an acute inflammation, which is an evidence only of the beginning of the end. But this is what we see through all Nature. If events appear sudden, they are but the exponents of some long anterior hidden causes. The fires of Vesuvius have long been smouldering below before they issue from the summit ; and the earthquake is only the result of the pent-up gases arising from chemical changes which have been slowly going on in the bowels of the earth. In society, an honest person cannot possibly become on a sudden a thief, nor a contented people suddenly break out in rebellion. A sane man cannot in an instant become mad ; and, as was observed in a late celebrated case, the event which brings the person to justice is but the sudden explosion of distorted feelings long dormant in the brain, but immediately excited by some trivial event. Although I say these are views which have been greatly promoted by the advance in pathology, yet the more profound observers had a glimpse of their truth, as had the father of medicine himself ; for Hippocrates says, “ Diseases do not fall upon men instantaneously, but, being collected by slow degrees, they explode with accumulated force.” I believe, in teaching, there is no more important fact to impress upon the minds of students than that diseases come insidiously and slowly ; and the circumstances which induce them are those most worthy of atten-

tion. When the older text-books spoke of attacking acute diseases in a healthy subject, it appears to us almost as Quixotic as making a thief suddenly honest, or making the French a tranquil people by a new form of government. * * *

I have already said that the body has hereditary tendencies to morbid changes of special kinds, rather than to mere accidental diseases, and, therefore, that the various tissues are liable to their own peculiar degenerations. When we speak, for example, of a gouty man, we imply much more than his liability to an attack of arthritic trouble; he may have, or not, a *materies morbi* in his blood, but he is liable to temporary and organic derangements of a given kind—such as granular kidney, diseased heart and blood-vessels, articular inflammation, and gravel. In tuberculosis, in like manner, there is a tendency to changes in the epithelium of the cutaneous or mucous surfaces, whether bronchial or intestinal. In the nervous temperament, the nervous system is liable to be thrown into unstable equilibrium. But not only in hereditary, but in acquired diseases, we find that the morbid changes are of a particular kind, and that special organs and tissues are also affected. Thus in chronic alcoholism, we find a tendency to fibrous thickening of the tissues, whether these be in brain, liver, or kidney. We find, again, degenerations of a particular kind in syphilis, and in lardaceous disease, which is sometimes its sequel. From other causes, we may find the whole of the bony skeleton diseased, or the lymphatic glands, or the skin. Thus, as before said, it is but a shortsighted view to see special organs only affected by disease, rather than a general morbid condition affecting particular tissues, and occurring under given determinate circumstances. Such views as these have arisen, I believe, from a closer study of the dead; and this has been so little perceived by some, that I have often had to vindicate this department of science to those who have seen no more in it than a curious prying into the body, in order to discover the destruction of some great organ or satisfy a curious diagnosis. At one time, it is true, a diseased organ was simply cut to pieces, and the rest of the body not examined; but now-a-days, when the process is more searching, I maintain that a much larger view of pathological processes is obtained by a dissection of the dead, than could be arrived at by mere observation at the bedside. The narrower views of the ward are expanded in the dead-house. Much larger conceptions are gained,

both as to the nature of the disease and its diagnosis. A simple name for a diseased organ is sufficient for the ward ; but the name for a distinct pathological process is required for the dead-honse. In a paper published some years ago, in order to vindicate this view, I took several examples in illustration ; and I said, if a person acquainted with healthy anatomy were placed in a room to dissect the dead taken from a hospital, he would very soon be able to arrange the cases in classes ; he would soon place together, for example, those who had chronic disease of the lungs, those who had died of typhoid fever, and amongst others, those who had that series of changes recognisable under the name of morbus Brightii, even though there might be some slight accidental difference in all of them. There might be, in a series of beds in a ward, one patient dying of pneumonia, another of laryngitis, another of peritonitis, and a fourth of apoplexy ; and it is possible under these names the cases might be found in the list of the Registrar-General ; but should they come into the hands of the necroscopist, as an unbiassed dissector he might find a recent inflammation of the lungs in one, or a clot in the brain of another ; but since in all he would discover like chronic changes in the kidneys, heart, arteries, and other organs, he would rightly place them together ; he would see that they all had the same pathology. This is sufficient to show how all but valueless are the Registrar-General's returns for pathological purposes ; for example, if effusion of blood in the brain is to be classed amongst nervous diseases, nothing but error can result in drawing any conclusion of a scientific character from such reports. What I at that time said should be the aim of the pathologist, I repeat now ; we should attempt to do for morbid anatomy what Bichat long ago performed for healthy anatomy.

Whilst I am on this subject, I must say a word in reference to another piece of pathology, on which a dissection of the dead can alone throw a light ; and one which ere this (I own a personal shame) ought to have been perfected ; it is akin to the matter of which we have been just now speaking. If it be true that the morbid changes are found progressing through tissues rather than affecting particular organs, as it were by accident, it follows that these different tissues have their own special morbid changes and none others. What we ask ourselves therefore is this question—what are the morbid changes to which each tissue is liable ? Now, it is constantly as-

sumed that degeneration may occur, and new growths of all kinds spring up, spontaneously in every part of the body, but this is certainly not the fact. If we take, for example, the list of diseases framed by the College of Physicians, which is in all your hands, it would seem as if there were certain morbid states, such as inflammation and its consequences, as well as various morbid growths, which may attack in turn every part and tissue of the body. But is this really so? The morbid anatomist ought long ago to have answered the question; and I believe, had my own attention been directed to this subject earlier, the amount of material passing under my hand would have been amply sufficient to have afforded a satisfactory solution to it. I will explain my meaning: suppuration of the lung is rightly not regarded as a stage of idiopathic pneumonia; consequently, if an abscess be found in the lung, we know that the seeds of it are brought thither from a distance, and we find the source of the pyæmia in some other part. Cancer, again, when found in the lung, has, in my experience, been secondary to cancer elsewhere, and thus we suppose the seeds of it have been thereto carried; (intro-thoracic cancer may be primary, but generally commences in other tissues than those of the lung); then again, as regards other classes of tumours, as fibroid, myeloid, osteoid, etc., they are invariably found existing there as secondary deposits. Now, if what I say be true, the primary morbid changes in the lungs are strictly limited; the epithelium may produce well-formed cells, as found in pneumonia, and ill-formed ones, as met with in the chronic degenerations, but beyond this the lung may be incapable of alteration. The same with other organs; the kidney undergoes certain limited changes, as seen in nephritis, but these do not terminate in suppuration, suppurative inflammation being always secondary; the liver also has certain definite changes, beginning either in the cells or the areolar tissue. The stomach has its own special changes, and is incapable of producing any new formations; as, for example, tubercle. It is thus probably very far from being true that abscess, tubercle, cancer, and other growths occur in all parts and tissues of the body; but, on the other hand, that all these have their favourite or perhaps special seats, and when met with elsewhere must be regarded as secondary formations. It is remarkable how surgeons have always tacitly acknowledged this fact; for, when meeting with a malignant tumour on the surface of the body, they

have seldom hesitated to operate from the fear of any internal complication, since their experience has taught them that the growth on the surface has been primary. On the other hand, the teaching of the surgeon with regard to inflammation and its consequences, as occurring on the skin, having been made applicable to the internal organs, has been the cause of a long series of pathological errors. A knowledge, therefore, of the special changes to which each tissue is liable is vastly important; the materials for furnishing us with the knowledge are always at hand, and the possession of it must be near.—*British Med. Journal.*

A NEW METHOD OF NOURISHING PATIENTS PER ANUM.—Dr. W. O. Leube, of Erlangen (*Deutsches Archiv für klin. Med.*) has made recent investigations on the nourishment of patients *per anum* with an injection-mass prepared in the following manner: With the object of introducing into the large intestine nutritive material resembling its ordinary contents, and of establishing, as far as possible, natural conditions in this part of the alimentary canal by artificially produced digestion, he has endeavoured to transfer to the large intestine a part of the digestive processes which normally take place in the small intestine.

From 90 to 100 grammes of the pancreas of the pig or ox are carefully deprived of fat, and finely minced. Then from 150 to 300 grammes of beef are minced and grated. Both substances are then rubbed down in a mortar with some warm water, in order to form a thick soup, which is taken up into a clyster syringe, furnished with a wide opening. If it is wished to submit, at the same time, fat to digestion, from 25 to 50 grammes of this substance may be added. Starch likewise may be added. A purgative enema is to be administered one hour previous to this nutritive clyster.

His experience clinically in the use of this mode of feeding is as follows:

1. The injected mass, when it consists of nothing more than meat and pancreatic substance, never causes any diarrhoea, but, on the other hand, generally remains in the large intestine from twelve to thirty-six hours without giving rise to a stool.
2. The patient experiences no disagreeable sensations after the

injection, but after a feeling of ease in the abdomen. In every case, he says he made out that the pulse became fuller, that there was an improvement in the general condition and spirits of the patient.

3. The clysters are not well borne at first; the least digested portion of the injected mass being returned.

4. The above-described injection-mass is superior to other substances recommended for rectal injections, through its efficiency, and the readiness with which it can be made.

Since the publication of the above paper by Dr. Lube the *Centralblatt für Med. Wissenft* of July 20th contains another article from him on the same subject, in which he says, that in the warmth of summer the pancreas begins very soon to undergo decomposition, and in consequence loses its digestive power and becomes irritating to the intestine, producing rapid expulsion of the material injected. These mishaps may easily be avoided by making a glycerine extract of the pancreas. This extract is quite equal in digestive power to the fresh pancreas, and will remain good for several weeks. The following is the manner of preparing this extract in glycerine. The pancreas of a bullock (which is sufficient for three enemata) is finely chopped and rubbed with 250 *grammes* of glycerine; and to each third of this, when about to be used, are added from 120 to 150 *grammes* of finely divided meat. It is important that this mass should be injected into the intestine as soon as it is made; for if it is allowed to stand, the meat swells and the operation is thereby rendered difficult.—(*Medical Record, New York.*)

ECLECTICS IN ONTARIO.

Dr. Morrison, Eclectic member of the Medical Council of Ontario, writes as follows to the *American Eclectic Review* :

“ Under the working of the present Ontario Act, it is not to be expected that any students will hereafter take the eclectic or homœopathic licence, since the allopathic licence will give them, in this province at least, a better position in a professional as well as a financial point of view. The result will be, that in fifteen or twenty years there will not be an eclectic or a homœopathic representative in the council, as by that time nearly all the licentiates of these schools now practicing in Ontario, will have died, removed from the country, or retired from practice. This will be the inevitable fate of

eclectics and homœopaths in this province. A repeal of the present medical act, and the re-establishment of the old eclectic and homœopathic medical boards would not be advisable for many reasons which I cannot now stay to detail.

A large number of the eclectics are advocating a union with the allopaths, on condition that they grant us some privileges which I am not at liberty to name now. This reaction in favor of allopathy is to be attributed to the fact, that many of our eclectic licentiates are graduates of allopathic colleges in Canada and the United States. Thus of the one hundred and five registered eclectics now practicing in Ontario, more than one-third are graduates of allopathic institutions. Three of the present eclectic representatives in the council, viz., Dr. Carson, of Victoria College, Ont. : Drs. Cornell and Muir, of the Electric Medical College of Pennsylvania, are in favor of the union, while Dr. Bogart, of the Eclectic College of New York, and myself are opposed to it at present. The matter will no doubt be decided by a vote of the eclectics before the next session of the council."

"The Ontario Medical Act was passed through the local legislature by certain interested parties in Toronto for the express purpose of suppressing eclectics and homœopaths, and from present indications it will certainly succeed. The act does not protect either the public or the legally qualified practitioner from the impositions of "quacks," who are as numerous here as ever, nor does it confer on the practitioner any rights or privileges which he did not before enjoy. The act has proved a total failure in everything except the suppression of the eclectic and homœopathic medical boards, and the establishment of a high and uniform standard of medical education which, however, is not higher than that which has been required by the University of Toronto for many years. But whatever may be the fate of eclectics in this province, one thing is certain, viz., that the battle which was begun by the founders of the eclectic system of medicine, has been fought and fought successfully. The allopaths have been compelled in a great measure to abandon the use of the lancet and mercurials as the result of our labors and influence, and it is not too much to say, that before another quarter of a century shall have rolled away, the more destructive features of their practice will be supplanted by the more rational practice of the eclectic system of medicine. They have stolen our *materia medica*, and adopted our views relative to the nature of fever and inflammation."

"On the other hand, however, it must be borne in mind, that the founders of the eclectic system of medicine never intended to build up a *sect* or party in the medical profession. They adopted the term "eclectic" as an appropriate and time-honored word descriptive of the spirit and practice of all liberal, independent and progressive medical men, and understood the term in the light of a

protest against exclusive opinions, and as an avowal of individual freedom and independence in both opinion and practice. If medicine is a science and surgery an art, there can be no sects ; science and art know no sectarianism."

"Before concluding this hastily written article, I desire to place one of my colleagues in his true light before our American friends. Dr. Carson, one of the eclectic representatives was justly censured by his colleagues and all other members of the council, for putting out among the public a vile compound called "Female Regulator," and some other nostrums. The doctor handed in his resignation after the council had struck his name off all committees. It is but just to state that Dr. Carson *is not an eclectic licentiate*, and consequently has no vote as an eclectic. He is a graduate of Victoria college, Ontario, and has always voted for allopathic representatives."

DR. RICORD ON SYPHILIS.*

There is one question which comes before the medical man very frequently : Can syphilis be cured radically ? That is the question which we will consider. There is an immense quantity of venereal disease cured—clap, swelling of the glands, soft chancres, warts—all these "accidents," not belonging to syphilis, and not associated with secondary symptoms, being radically cured. Since these have been distinguished from real syphilis, there have been great differences in the treatment of them, and they have been radically cured. Doubts have been raised whether real syphilis can be radically cured ; and those doubts are not new. Mercurialis thought that it was liable, even after the lapse of years, to break out again ; and the doubts remain in the minds of many whether it can be cured radically, or whether it can be cured only temporarily. Well, that doubt may remain until I establish before you that the law regarding syphilis is the same as the law regarding the small-pox, measles, and such like. You can have at the one time only one small-pox, only one cow-pox ; and as, just so long as the cow-pox influences the system, you cannot have another small-pox or another cow-pox, so in syphilis ; for, as long as the patient is suffering under the syphilitic diathesis arising from an indurated chancre, he cannot have another indurated chancre. The application of this law is that, while a man is suffer-

*Speech in the Surgical Section British Med. Association, August 9th, 1872.

ing under the effects of secondary symptoms, he cannot have a chancre of an indurated character ; so that if you want to know whether the system of a man is altogether free from syphilis, you can do so by inoculating him with an indurated chancre ; if it take, he was free ; if not, he was insusceptible. That is a great point to be reached in the science of medicine. I say, and say distinctly, that syphilis can be radically cured.

Now as to the case of syphilis in the first stage—the primary sore. You have first to find if this be really the hardened chancre, and it comes with the swelling of the glands ; but with it the glands never suppurate. I at once institute the mercurial treatment. Now, there is one point here upon which there is a difference of opinion, for some think that you cannot prevent the secondary symptoms ; but I say that if the treatment be well done and soon done—and this is most important—you can prevent the first bursting out of the secondary symptoms. Why it is not prevented is, that the treatment is applied too late in the first instance, and the secondaries often come before the treatment of the primary is commenced. But if you make the treatment of the primary early and effective, the secondary will not appear ; I can give you warrant for that. The best treatment for the secondary symptoms is the mercurial, and it must be continued and continuous. In Germany, and other places as well, the treatment of the secondary symptoms is not continued long enough. You should choose a treatment which does no harm to the constitution, and continue it for five or six months, and you will have very few cases of relapse ; and, after the mercurial treatment is finished, go on for another six months with iodine. When a person comes to me, I tell him that he will have to continue under treatment twelve months. If he will, he will ; but if not, then I say at once “good bye.” But then, you know, there are complications. The treatment I have given you is for syphilis arising in a person who is otherwise healthy, and there is then but one enemy to fight against. But in other cases you may have, in addition, scrofula, or an otherwise bad constitution. Well, then the case is not the same ; for many of these constitutional disturbances are interfered with by the syphilitic treatment. In many of these cases, the syphilis is the second thing to look at, and you must begin with the constitutional disease first ; you must attack the strongest enemy first, and he sometimes waits until you come to him

before he opens his attack. Then you must come on gradually with your syphilitic treatment ; and that which I prefer in complicated cases is iodide of mercury, which causes little diarrhoea. One capital treatment is that of rubbing in—it is easy and effective. But there are cases in which the rubbing cannot be employed. In the next stage, I employ iodide of potassium. I use large doses of this, up to 60, 70, 80, and 100 grains a day, and even more. I have made experiments with this ; and I have found that, half an hour after the dose has been given, it has passed through the urethra ; and it is in reality a sort of broom to the blood. The supply must be kept up. In secondaries, a treatment partially of this iodide and of mercury has its advantages. I have had the potassium stop doing good, and I have gone back to the mercury with good results. That is what Mr. Acton has said, and I quite agree with him. When syphilis has lasted a long time, and has had great effect upon the constitution, it somehow disappears, and leaves the patient suffering from a complication of diseases which may have been existing before. Well then you must stop all syphilitic treatment, and repair the deterioration of the blood by iron and bark. Mr. Acton spoke about the use of bromide of potassium ; and I agree with him in its use, for it is a splendid remedy for a complication of syphilis in some cases—in syphilitic diseases of the brain and nervous system ; but you cannot depend upon it as an antisymphilitic remedy.

Now I would impress upon you that you can tell your patients that this terrible disease can be radically cured if they have the courage sufficient to go through the treatment, and their physician have the courage to go through it with them. I again thank you for the cordial reception you have given me.—*British Medical Journal*.

CORONERS.—Chas. D. Tufford, Esq., M.D., London to be Associate Coroner for the County of Middlesex. John Church Chamberlain, Esq., M.D., of the Township of South Fredericksburgh, to be Associate Coroner for the County of Lennox and Addington. Algernon Wolverton, Esq., M.D., of the city of Hamilton, Associate Coroner for the County of Wentworth. Wm. De Witt Clinton Law, Esq., M.D., of Bond Head, Associate Coroner for the County of Simcoe.

Dr. Lavell, of Kingston, has been appointed Surgeon to the Penitentiary.

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LIBERTY OF HEALING.

A good deal of newspaper discussion has been elicited within the last few weeks regarding the prosecution of a quack in Port Hope, named Ryder. The circumstances of the case are as follows: Mr. Ryder rented his farm a short time ago and attended lectures in a hygienic school in New Jersey, for a term of about 20 weeks. He then returned to Canada and commenced practising medicine in the town of Port Hope, Ont. At the instance of Dr. Dewar, President of the Medical Council of Ontario, he was summoned before a Magistrate and fined \$25 for practicing without a license. The editor of the *Globe* makes this the occasion of an article on "*Medical Infallibility*," the tone of which has caused us a good deal of surprise and astonishment. In the first place we do not think it is exactly the thing to seem to uphold men in the violation of any law, whatever one's private opinion concerning that law may be. The point upon which the editor of the *Globe* seems most inclined to take issue is as to the propriety of an enactment compelling all medical men to come up to a certain standard, and to pass an examination on certain subjects which do not form a part of their creed. He also complains that no provision is made for the admission of Hygienists to become legal members of the medical profession in Ontario. Here he is entirely in error. There is nothing to prevent a Hygienist from entering the profession through the same portal

as the "Homœopath," the "Eclectic," or the "General School." True, there is no special examiner appointed for that school, neither do we see any occasion for such. We are all Hygienists in the true sense of the term, and besides, the utmost latitude is allowed in reference to the treatment of disease. What the law requires is that every medical man shall be well grounded in the fundamental branches of medical science, and so far as the practical part is concerned he may practice whatever system he chooses. It may seem hard in one sense to compel a highly qualified man, coming from the United States or Europe, to go through the ordeal of an examination before the Board of Ontario, but we are sure it is much better, and safer for the public, than that incompetent and ignorant men should be let loose upon the community, which would be the case if we had no law to prevent it. If Dr. Ryder wishes to practice in Canada as a Hygienic Physician all he has to do is to qualify himself as all other medical students do. No exception will be taken to his hygienic ideas regarding the treatment of disease. He can obtain his license and practice any system he chooses, without let or hindrance. Can anything be more liberal than that? And yet we are charged with being bigoted. The fact is it is these men of only idea who are really bigoted. All that we ask, and we ask it in the interests of the public, as well as in the interest of the profession, is that all medical men, call themselves by whatever name they choose, shall be liberally educated and thoroughly qualified for their calling, and, if that be secured, we can safely give them the fullest liberty in the art of healing.

ELECTRICITY IN DISEASE.

The application of Electricity in the treatment of disease has of late received a good deal of attention from scientific men both in Europe and America. Unfortunately for the science, it has hitherto been almost exclusively in the hands of the charlatan, ignorant alike of its properties and its proper application. Very few physicians, even of the present day, are familiar with the different forms of electricity and the various instruments in use, much less the Therapeutics of the subject. This is in great measure owing to the fact that the attention of the profession has not been directed to its

use. One thing more than any other which has militated against its use is, that until within the last few years the instruments in use have been very imperfect, uncertain, uncontrollable, and not possessing any arrangements for its proper application. This has been overcome to a great extent in the improved make of machines and appliances. The Galvano-Faradiic Company of New York are solely engaged in the manufacture of electrical instruments for Medical use. Their instruments are well got up, portable, reliable, clean, and require very little attention. They are quite under control, and possess a wide range of vibration. For some forms of paralysis and rheumatism they are preferable to any other.

Dr. Kidder, of New York, also manufactures a very superior instrument. It is very smooth in its action, never fails when wanted, and the most delicate organ can be operated on by it. It is well adapted to extremely nervous persons. A good deal of confusion seems to have arisen in reference to the various forms of electricity, owing to the employment of so many different terms expressive of the kind of current employed. All this may be avoided however if we recollect that aside from magnetism and static electricity there are but two forms manifest—galvanic and faradic electricity—with the first of these the terms primary, constant and continuous are synonymous; with the second the terms secondary, induced and interrupted exactly agree. The former affects powerfully by reflex as well as by direct action. It has power to stimulate directly the brain, spinal cord, and great sympathetic; and is preferred in the treatment of many forms of central disease. The latter works slightly by reflex action, having but little power to influence directly the brain or spinal cord. The galvanic is therefore used in deep-seated affections of the brain and spinal cord, to produce contraction of paralyzed muscles that fail to respond to the faradic, and in electro-surgery to produce electrolysis or cauterization. The faradic, on the other hand, is used when it is required to act mildly on the nerve centres, to excite muscular contraction when the muscles are capable of responding, and to produce strong mechanical effects. The electrolytic power of the galvanic current has within the past few years, been repeatedly used in the treatment of morbid growths, and has been found sufficient in many cases to dissipate tumors, both malignant and non-malignant. It seems also to possess the property of destroying the reproductive power of malignant growths. Improved appli-

ances have also been constructed for the application of galvano-cautery, for the removal of tumors, cauterization of ulcers, treatment of fistulæ, amputation of diseased parts, &c. In the amputation of such parts as the neck of the uterus, polypi, &c., that are difficult of access, this method is invaluable. The wire can be adjusted before heating; there is scarcely any pain, and little or no hemorrhage follows its use.

Electricity, like many other remedies and appliances, has its indiscreet and ignorant partizans, and for that reason has been long neglected and despised; but it is now being raised to its proper place, and is undoubtedly destined to be greatly extended in its sphere of usefulness.

MEDICAL ASSOCIATIONS.

BRITISH MEDICAL ASSOCIATION.—The 40th annual meeting of the British Medical Association was held in Birmingham during the month of August. Dr. Baker, the President, delivered an address which will be found in another column. Addresses were also delivered on medicine by Dr. Wilks, and on surgery by Mr. Oliver Pemberton. The presidents of sections also opened them with addresses, some of which we have endeavored to give our readers. The attendance was very large and the arrangements most complete. We regret that our space does not permit us to give anything like a full account of the proceedings. We have made a few selections for the present month and will endeavor to supplement them in our next issue. Additional interest was imparted to the meeting by the presence of distinguished visitors from foreign countries, among whom were Ricord, Demarquay, and Labbé, of Paris; Gross of Philadelphia; Bogue of Chicago; A. Smith, of New York; Berns of the Hague, and De Muralt of Zurich. There were over 500 persons in attendance, and the session lasted four days. Excursions were made by several of the members in attendance, to the Stoke Salt Works in Worcestershire, Dudley Iron Works in Round Oak, Sewage Works, &c. of Leamington, Stratford-on-Avon the birth-place of Shakspeare, &c., &c. It was upon the whole, the largest, the most interesting and influential meeting of the profession ever held in any country of the world.

CANADIAN MEDICAL ASSOCIATION.—This was held in Montreal on the 11th and 12th ult., the proceedings of which we give in another place. The attendance was not what might have been expected, and the meagreness was in some measure owing to the opposition to the proposed Dominion Medical Bill. The President's address was read by Dr. Marsden of Quebec, the author being unavoidably absent. It will be found in another column. Some very interesting papers were also read, which will shortly be published. The proposed Medical Bill has received its quietus, and the association will take up its own legitimate work, and we bespeak for it greater success, and we hope soon to see infused into it some of the vitality which marks that of our brethren on the other side of the ocean. Drs. Grant and Worthington have offered a gold medal for the best essay on the Zymotic Diseases of Canada, to be competed for at the next annual meeting. We are not quite sure whether this will accomplish the object they have in view, at all events the time is rather short for the amount of work to be done. To do justice to an essay of that kind will require more than a year, even if one's whole time were devoted to the subject.

CLINICAL INSTRUCTION.

Arrangements have been entered into by the several Medical Schools in Toronto for the regular delivery of clinical lectures in the Theatre of the Toronto General Hospital by the acting members of the Hospital Medical staff. There will be *four* clinical lectures delivered weekly at such hours as will best suit the convenience of students in attendance. Unusual facilities will thus be afforded students attending the Hospital for the clinical study of Medical and Surgical diseases, the importance of which cannot be too highly estimated.

We are glad to see that the Teachers of the various Medical Schools in Toronto are alive to the interest of the students who may place themselves under their instruction, and we feel certain that their action in reference to this matter will be fully appreciated. This arrangement will tend to make the clinical teaching of the Toronto General Hospital second to no other in the Dominion. Surgical operations will be performed on Saturdays at one o'clock.

NOTES AND COMMENTS.

FRACTURE OF BASE OF SKULL.—A remarkable case of recovery after fracture of the base of the skull is reported in the *Glasgow Medical Journal* for August 1872, by Dr. Kelly, of Glasgow. The patient was 21 years of age. He was injured by the falling of a mass of coal, weighing about two hundred weight. Blood flowed from his nose, mouth, and left ear. The latter continued about two days, and was followed by total deafness, and the escape of *watery fluid*, which continued about 12 days. The quantity of fluid that escaped was estimated at about 14½ pints. Twelve weeks after the accident all the threatening symptoms had subsided, but sensation was deficient on the left side of the face and head, and the muscles paralyzed. The left ear was completely deaf, but his intelligence was unimpaired. The case is interesting as showing that recovery may take place even in this usually fatal accident.

MEDICAL REGISTRAR'S OFFICE.—We have been requested to announce that Dr. Pyne, Registrar of the College of Physicians and Surgeons, Ont., has opened an office in the School of Technology, Toronto. Parties at a distance having business to transact with him will please address, Dr. Pyne, Registrar, Toronto, and it will be promptly attended to. The Ontario Government has kindly granted the use of two large rooms in the above mentioned School for the use of the Council.

MEDICAL MEN IN THE HOUSE OF COMMONS.—The Medical Profession will be represented in the next House of Commons by the following members :—Drs. Bergin, Brouse, Grant, and Landerkin, of Ontario ; Fortin, Fiset, Lacerte, Paquet, Robitaille, and St. George, of Quebec ; Almon, Forbes, and Tupper, of Nova Scotia ; and Schultz, of Manitoba.

APPOINTMENTS.—Dr. Drake has been appointed Prof. of Institutes of Medicine, McGill College,—the chair rendered vacant by the death of Dr. Fraser. Dr. Ross has received the appointment on the staff of the Montreal General Hospital in place of the late Dr. Fraser, and Lecturer on Clinical Medicine, in connection with McGill College.

MEDICAL ELECTIONS.—We beg leave to remind the Medical Electors of the Territorial Division of Midland and York that the

election of a representative for the above Division in the place of the late Dr. Agnew will be held on the 7th inst. Voting papers will be forwarded to all "registered practitioners,"—who are alone entitled to vote,—in due time, by the Registrar, Dr. Pyne.

TREATMENT OF BURNS AND SCALDS.—Dr. Montgomery, in the *Pacific Medical & Surgical Journal*, speaks highly of the efficacy of warm and soothing applications in the local treatment of burns and scalds. For that purpose he recommends poultices of slippery elm or linseed meal to be applied immediately, and covered with oiled silk. He records a number of cases in which this treatment was pursued, and with the most satisfactory results. It soothes the pain and excludes the air.

DEATH FROM ETHER.—A death has recently occurred in Bellevue Hospital, New York, from the inhalation of Ether. This is a circumstance of such rare occurrence that we wait with anxiety for the particulars of the case.

RUPTURE OF THE URINARY BLADDER.—Opening the bladder by means of the lateral operation as for stone is strongly recommended in the treatment of this accident. This plan of treatment was brought to the notice of the profession by Dr. Walker, of Boston. It has been put into practice in two cases, one by Dr. Walker and the other by Dr. Mason, of the University of New York, reported in *New York Medical Journal*, August, in both of which it was successful. This is more than can be said of other forms of treatment. It should be done early.

MANAGEMENT OF THE PLACENTA.—Dr. Churchill has recently laid before the Dublin Obstetrical Society the statistics of his 39 year's Obstetrical practice. In reference to the time which elapses between the birth of the child, and the expulsion of the placenta, he gives a record of 2387 cases :—In 1965, it was 5 minutes ; in 278, it was 10 ; in 61, it was 15 ; in 25, it was 20 ; in 27, it was 30 minutes, and in 8 cases it was an hour—among them were three cases of *post partum* hemorrhage, with one death, also 10 cases in which extraction was necessary from flooding, irregular contraction and morbid adhesion. He mentions that many of the cases in which the longer intervals elapsed occurred in the earlier part of his practice, before he had realized the safety and value of pressure so

applied as to squeeze out the after-birth from the uterus into the vagina. Firm grasping pressure applied immediately after the birth of the child and continued for a few minutes, he found generally sufficient to expel the placenta from the uterus into the vagina, from which it is easily removed. He had never known hemorrhage follow cases thus treated.

CHLOROFORM IN PUERPERAL CONVULSIONS.—Chloroform is coming to be regarded as a most valuable remedy for the treatment of Puerperal Convulsions : several cases have been reported lately in the various Medical Journals, in which that treatment proved highly serviceable. In those cases in which we have had the opportunity of trying it, it has succeeded admirably ; and we have, therefore, no hesitation in recommending it in all cases in which there is no contra-indication to its use.

TREATMENT OF GLEET.—Dr. Woodson, in the *Kansas City Medical Journal* recommends deep injections in the treatment of this affection. He uses a large sized catheter pierced at the curved end with small holes, for the space of $2\frac{1}{2}$ or 3 inches, and having the eyelets closed.

This instrument being introduced, the injection is thrown in by a strong rubber syringe. The diseased parts can only be reached by these means. He also applies small blisters to the perineal portion of the urethra. The injections used are Tr. Iodine 1 drachm to the ounce of water, Nitrate of Silver 5 grs. to the ounce, or Monsel's solution (Ferri persulphas).

IDIOPATHIC TETANUS.—A case of Idiopathic Tetanus is reported in the Montreal General Hospital, under the care of Dr. Drake. The patient was a sewing girl, aged 17, Canadian, "always weak and delicate ;" no apparent cause can be assigned for the occurrence of the attack, except that she got wet in the rain. The treatment consisted in chloral every two hours ; Ext. Belladonna plaster to spine, and ice bag over it ; beef juice and brandy by injection, and small quantities occasionally by the stomach ; Hypodermic injections of Atrophine— $\frac{1}{60}$ gr. —were also tried. The patient died on the third day.

FINED FOR PRACTISING WITHOUT LICENCE.—An imposter, calling himself Dr. Ryder, practising as a Physician under the so-

called "hygienic system" in the town of Port Hope, Ont., was summoned before the police-court on the 13th ult, at the instance of Dr. Dewar, President of the Medical Council, for practising without a licence in violation of the Ontario Medical Act, and was fined \$25 and costs. He was told by the judge that this could be repeated as long as he continued to practise in violation of the law.

PROF. TYNDALL'S VISIT.—This distinguished gentleman is expected in New York some time during the present month. He will remain for several months, and is engaged to deliver lectures in the principal cities of the United States.

HYPERTROPHIED TONSILS.—NEW TREATMENT.—The application of fine needles of chromic acid to the tonsils causes notable shrinking of the parts, and is almost without pain or danger. By frequent application of this remedy the hypertrophy may be reduced to one-half its volume. Iodine dissolved in 100 parts of Glycerine is also injected into the tonsil in some cases.—(*Dr. Fränkel in the Berliner Klin. Woch.*)

MONOBROMATE OF CAMPHOR IN DELIRIUM TREMENS.—Dr. Allen McLane Hamilton, of New York, speaks highly of this remedy in the above disease. He has also tried it in chordee with most excellent results, and considers it superior to camphor and opium.—(*New York Med. Journal.*)

INJECTION OF AIR INTO THE UTERUS CAUSING DEATH.—Mention is made in the 'Gynæcological Journal,' Boston, for August, of a case of instantaneous death during the induction of criminal abortion by the injection of air into the uterus. The woman was quite dead when the physician arrived, and a Davidson syringe, which she had used, was lying beside her. An autopsy was made the following day. The uterus contained a foetus of about 6 weeks. The membranes were unruptured, but were detached from the walls of the uterus in several places. A similar case occurred at St. Louis some time ago. Another case was reported by Dr. Hitchcock, of Mich., in the Trans. Am. Med. Association, 1864, p. 81. Death in this instance was supposed to have been caused either by the entrance of air into the circulation, or by shock. The *post-mortem* did not throw much light on the subject.

CHRONIC INVERSION OF THE UTERUS.—REDUCTION.—Dr. Braxton Hicks, Guy's Hospital, in the *British Med. Journal* of August 31st, reports two cases of chronic inversion of the uterus reduced by him. Both cases were attended with considerable difficulty. His plan is first to dilate the vagina, and with it the os and cervix, by means of air bags introduced into the vagina, and kept there two or three days. The apparatus for pressing on the fundus of the uterus is a vulcanite stethoscope, having a pear-shaped elastic bag drawn over the thoracic end, and tied tightly round the stem, and inflated by means of a stopcock adjusted to the aural end. Pressure is then made by means of a T bandage, and continued steadily for 24 or 48 hours. Should this not succeed, manual pressure under the influence of chloroform is resorted to.

CORRESPONDENCE.

CANADA MEDICAL ASSOCIATION.

The Fifth Annual Meeting of the Canada Medical Association was held in Montreal on the 11th ult. The attendance was very small, there being only two members present from the Province of Ontario. The President, Dr. Sewell, of Quebec, was absent, but his address was read by Dr. Marsden, of Quebec. It was as follows:—

GENTLEMEN,—The next thing in the order of proceedings is the address of the President. Last year Dr. Parker extended his observations over such a very large field, embracing almost every possible subject, that I really find but little left to comment upon or suggest. There are, however, one or two points upon which I would like to touch briefly.

It is to be regretted that little or no progress was made last session with the Medical Bill. It will be again submitted to-day for your consideration, and in its discussion it is very much to be desired that all sectional or private interests may be laid aside. The question is not this province or that, this school or the other. We are here to discuss and adopt such a "Bill" as will conduce most to public good and the elevation of our own profession. Let me, therefore, bespeak from the members of this Association that reciprocal kindliness of feeling, which will tend greatly to the peace and harmony of the meeting, while it will expedite the business in which we are all so interested. Medical education is, without doubt, the most important subject that can occupy the attention of a body like

this. No argument of mine is necessary to show that this must be the foundation of the professional character in every country. I trust, therefore, that the Bill now to be considered, and which has for its object the advancement of medical education in this country, will be sufficiently advanced at this session that it may be laid before Parliament at its next meeting.

On looking over the curriculum to be enjoined on medical students I am struck with the small amount of time given to clinical instruction. Although two courses of three months upon clinical medicine and clinical surgery are all that is required at most of the recognized schools, still a moment's reflection will satisfy any one that this is far too little. Clinical instruction, as now conducted, is made subordinate, and, as it were, a secondary branch, instead of being put forward as one of the most important and most indispensable subjects of professional instruction.

The importance of demonstrations in lectures upon all subjects, medical or otherwise, requires no proof, and surely no demonstration can be so effectual to the medical student as the illustration of the remarks of the professor, by an exhibition of the patient in all the different phases of the disorder.

Again, not only should the number of clinical lectures in the different schools be increased, but greater facilities should be afforded to the student to prosecute his studies at the bedside. For this purpose the Hospital Fees should be much reduced, or, if possible, entirely abolished. With regard to this matter I am happy to say that in Quebec we have taken a step in the right direction. Our hospitals are almost free, while the number of clinical lectures on medicine and surgery, apart from those given on diseases of the eye, amount to 360 per annum—240 only are required by law.

I believe the student cannot too soon commence his attendance at the hospital, and although his medical education may not be sufficiently advanced to enable him to profit by this attendance, to its fullest extent, still if he is observant, he will pick up much which will be invaluable to him hereafter, and he will learn much which will render the lectures he will receive later on in the College far more intelligible, and therefore far more profitable than they would otherwise be. To the same effect is the language of the great Trousseau. Addressing his class, he says, "Clinical instruction should not be deferred till near the end of the student's curriculum. From the day a young man determines to be a physician, he ought to attend the hospital. It is essential to *see—to be always seeing*—sick persons. The heterogeneous materials. They may be for the present useless, but at a later time he will find them stored in the treasure house of his memory." And they will become of incalculable service to him.

Let me here throw out a hint which, if acted upon, might be of advantage to our students in all the different schools. I allude to

the situation of house surgeon in our various hospitals. Hitherto, I am of opinion, these officers have retained their appointments too long, to the exclusion of others from those advantages which they themselves (it is to be presumed) no longer require. In each hospital I would like to see a house surgeon and an assistant house surgeon. The former should be a licensed practitioner, the latter a student in his fourth year, who, if found qualified, should succeed his chief the following year on being received. By this arrangement each house surgeon would spend two years in the hospital, a rotation system would be established, a stimulus would be given to the students, and a larger number of them would benefit by the advantages thus afforded. I do not hold positively to the periods here laid down, but I believe the hint here thrown out might be acted upon or modified to the great advantage of our students.

Again, in the interest of the students, there is yet another point upon which I would like to touch. I allude to the adoption of trimestrial examinations in all schools of medicine. My colleagues and myself can testify to the immense amount of labour which this entails on the professors, but we can also testify to the immense advantages it affords the students—and herein we are amply repaid. These examinations are conducted by a committee of the Faculty, each professor examining on his own branch in the presence of his colleagues. At Laval there are three terms in each year; consequently the student undergoes twelve of these almost public examinations in the course of his four years' study. The advantages to be gained by the students are, first, and perhaps above all, a strong inducement to him to commence his studies in earnest the very day he enters the college. Secondly, by these examinations he discovers whether his lectures or private reading have been profitable to him or not; and lastly, he learns to appreciate and take in the full scope of his professional questions, and by frequent habit, he obtains a facility of answering. The quarterly examinations above alluded to are of course in addition to the usual weekly examination in each class.

The course of study is I see to extend over a period of four years. This is not too long, but perhaps it would be well to specify distinctly in the bill that no degree *ad practicandum* shall be conferred before the full expiration of his term.

It has been suggested by the Association of Medical Superintendents of American Institutions for the Insane, that in every school of Medicine, conferring degrees, a course of lectures should be given on insanity and medical jurisprudence, as connected with disorders of the mind. As most of the cases of insanity in their earlier stages come under the care of the ordinary physician, this is, perhaps a subject which may occupy the attention of the different collegiate councils of this Dominion.

Last year Dr. Parker directed the attention of this association,

in very earnest language, to the necessity of establishing institutions for the treatment of inebriates. It is very much to be regretted that up to the present moment the Government of this Dominion has taken no action in this most important matter. It is true that Dr. Wakeham, with that enterprise and intelligence which have always characterised him, did some years ago, at his own risk and cost, open an institution in the neighborhood of Quebec, for the purpose alluded to, and has maintained it ever since upon a most respectable footing, though I fear at a considerable pecuniary loss. This he has borne, in the hope, hitherto a vain one, that government would ere this have come to his assistance. It is also true that an Act was passed by the Local Legislature in 1860, authorising the interdiction of inebriates, so that now these persons may be controlled and sent to such institutions for treatment. So far so good. But still this does not exonerate the General Government from the great responsibility which lies upon it in this matter. I agree entirely with your late President that all governments are as much morally bound to make provision for the treatment of this class of sufferers as they are to find hospital accommodation for the treatment of other forms of disease, whether of the mind or body. It will no doubt have been seen by many of you that Drs. Parrish and Dodge, Superintendents of the Sanitariums of Binghampton and Media, have been formally invited to appear before the British Parliament to give a detailed history of Inebriate Asylums in the United States, the system of treatment adopted in them, and its success. This is a most praiseworthy step on the part of Great Britain, and will be followed no doubt by other governments, our own, may it be hoped, included.

There is yet another subject to which this Association might call the immediate attention of the Government. As the law now exists no insane person, however violent [*being also an epileptic,*] can be admitted into the public asylums of the country. The consequence is our gaols constantly contain several of these doubly afflicted persons, who are exposed to the jeers and jibes of those around them, inducing, no doubt very frequently, epileptic paroxysms, which under more favourable circumstances, might have been avoided. Why an insane person, because he is also an epileptic, should be less dangerous to himself or others, or requires less the protection of Government for the same reason, I am at a loss to understand. On the contrary, being doubly afflicted, he should be a special object of sympathy, care, and protection. I believe this matter has only to be brought under the notice of the Government to be at once remedied. There are some other points upon which I might dwell, as for example the better regulating of the duties of chemists and druggists in large cities, medical fees in courts of justice and at coroners' inquests, &c., but as there is a good deal of work before the Association, and but little time to do it in, I prefer waiving these, so that we may proceed at once to the discussion of the Bill.

The reading of the address, together with other routine business, occupied the principal part of the *first days'* proceedings.

The *second days'* proceedings consisted in the reading and discussion of papers on various Medical subjects, reports of committees, &c., &c. The following were the papers read :—"On the Extinction of Syphilis," by Dr. Debonald ; "On Scarlatinal Pleurisy," by Dr. Howard, of Montreal ; "On Calculus of the Bladder," by Dr. Fenwick, of Montreal. The discussion of the contemplated Dominion Medical Bill was then entered upon, the subject being introduced by Dr. Howard, chairman of the Publication Committee, and a lengthy debate followed, in which nearly all the members present took part. On motion, it was finally decided to postpone all further action on the subject for two years.

The committee on Canadian Necrology brought in a report, in connection with which mention was made of the late Dr. Fraser, of Montreal, and Dr. Blanchet, of Quebec, and a fitting tribute paid to their memory. Drs. Grant, of Ottawa, and Worthington of Sherbrooke, announced that they would present a gold medal to the Association, to be given for the best essay on the Zymotic Diseases of Canada, the medal to be competed for at the next annual meeting of the Association.

The following gentlemen were appointed as a committee of examiners on prize essays :—Drs. Howard, Fenwick, David, Rottot, and Peltier, all of Montreal. The following committee was also appointed to consider and make some necessary amendments to the Bye-laws of the Association, and report at next meeting. Drs. Hamilton and Gordon, of Nova Scotia, and Dr. Botsford, of New Brunswick.

NOTICES OF MOTION.

Dr. Marsden, of Quebec, gave notice that he would, at the next meeting, move that the names of all members of the Association who have been absent from the annual meetings for three consecutive years, and have neglected to pay their fees during that time, be declared to have forfeited all right to membership.

Dr. Marsden also gave notice of a motion to increase the annual fees of members,

The following gentlemen were appointed to prepare and read papers at the next meetings :—Dr. Howard, of Montreal, on Medicine ; Dr. Hingston on Surgery ; and Dr. Botsford, of New Brunswick, on Hygiene.

On motion, it was decided that the next annual meeting should be held at St. John, N.B., and should take place the first Wednesday in August, 1873.

The following gentlemen were elected officers for the ensuing year :—Dr. Grant, of Ottawa, President ; Dr. David, of Montreal, Secretary.

The Association then adjourned.

BOOK NOTICES.

THE PHYSIOLOGY OF MAN, by Austin Flint, jr., M. D. Vol. IV.,
The Nervous System. New York: D. Appleton & Co.; Tor-
onto: Willing & Williamson.

This is the fourth volume of a series on the subject of Human Physiology, the fifth and last of which is promised within a year. This work, in five volumes, will be one of the most complete treatises on the subject in the English language. The volume now before us has been published in connection with Dr. Hammond's work on Diseases of the Nervous System. The two are intended to form a complete work on the Physiology and Diseases of the Nervous System. A great amount of care and labour have been expended on the present volume. The style is clear; the matter well arranged, and does the author infinite credit. It is a critical digest of the subject on which it treats, and will be read with interest by all lovers of the science.

SMALL-POX AND VACCINATION, by Dr. Carl Both. 2nd edition.
Boston: A. Moore & Co.

REPORT OF THE MEDICAL SUPERINTENDENT OF THE ROCKWOOD
LUNATIC ASYLUM for 1871. J. R. Dickson, M. D., M. R. C.
S., etc., etc., Kingston.

BRAITHWAITE'S RETROSPECT for July, 1872. Townsend & Co.,
New York. Price \$1.50.

HALF-YEARLY ABSTRACT OF MEDICAL SCIENCE. H. C. Lea, Phil-
adelphia.

OBITUARY.

Died at his residence, Brantford, Ontario, August 6th, Edwin Theodore Bown, M.D., æt. 42 years. The deceased was the fourth son of Samuel Bown, M.D., and was born in Highbury Terrace, Parish of Islington, London, 1830. The family came to this country many years ago, and R. R. Bown, Esq., purchased a large farm in the Ox-Bow, now Bow Park and the property of the Hon. George Brown. He also bought a tract in the Eagle's Nest, about a mile down the Grand River from Brantford, which he still holds. Dr. E. T. Bown graduated at the University of Pennsylvania, U. S., in

1854, and took the degree of Bachelor of Medicine at the University of Trinity College, Toronto, in 1855. The University of Victoria subsequently conferred upon him the honor of M.D., and he was elected in 1860, member of the Natural History Society, Montreal. He was Coroner of the County of Brant, and Surgeon of the 38th Battalion. Dr. Bown spent his whole professional life in Brantford, having commenced practice here in 1854. Starting in his career with a respectable competency he enjoyed advantages to which few of his professional brethren of the same age in the towns and rural portions of Ontario can lay claim. When to these were added affable manners, a gentlemanly deportment, a generous hospitality and exceptional skill in the practice of his profession, it will readily be inferred that fortune was not niggard of her favours. For many years before his death he enjoyed a very extensive and lucrative practice. His death has left a blank in the profession here, and is much regretted by a very wide circle of relatives and personal friends. The remains of the deceased were interred in the family vault at Hamilton, the most conspicuous and costly mortuary monument in the Cemetery of that city. His brother, Dr. Walter R. Bown, of Red River, is sole executor to his property, and his eldest brother, John Young Bown, Esq., M.D., M.R.C.S., Eng., ex-M.P., of the North Riding of Brant, is the lessee of his late residence, and succeeds to his practice.

On Sunday, the 22nd ult., at the residence of his brother-in-law, Fred. L. Hooper, Esq., in Hamilton, WALTER JAMES HENRY, Esq., M.D., of Ottawa, eldest son of the late William Henry, Esq., M.D., Inspector-General of Hospitals, aged 37 years.

At his residence, Napanee, Ont., on Saturday, the 14th ult., Dr. Thomas Chamberlain, in the 63rd year of his age.

Law Respecting Periodicals, Newspapers, &c.

1. Subscribers who do not give express notice to the contrary, are considered as wishing to continue their subscriptions.

2. If subscribers order the discontinuance of their periodicals or newspapers, the publisher or publishers may continue to send them until all arrears are paid up; and subscribers are held responsible for all numbers sent.

3. If subscribers neglect or refuse to take the periodicals or newspapers from the office to which they are directed, they are held responsible till they have settled their bills. Sending numbers back, or leaving them in the office, is not such notice of discontinuance as the law requires.

4. If subscribers remove to other places without informing the publisher, and their periodicals or newspapers are sent to the former directions, they are held responsible.

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No. 3.

Original Communications.

LACTIC ACID IN DIABETES.

By A. HAMILTON, M.A., M.B., MILLBROOK, ONT.

"We learn more by our failures than by our successes."—BAUER.

Since the much-promising skim-milk treatment has now been, I think I may say fairly, abandoned as judicious treatment for Diabetes Mellitus, and some members of the profession are now turning with some degree of hope to the lactic acid treatment lately brought to our notice by Prof. Alnaldo Cantani, of Naples, I deem it not premature to report the results in two cases under my observation in which his treatment, so far as it seemed possible to carry it out, was given a trial, with what fairness is left to the judgment of the reader. It consists in giving lactic acid with an exclusively flesh diet.*

CASE I.—A married lady, æt. 38, first had diagnosis of diabetes made in Sept. 1871, when the primary symptoms had been troubling

* A statement of Cantani's theory will be found in the *Canada Lancet* for September 1872, p. 48, and a more extended statement, with details of treatment and the pathological views upon which it is based, by Dr. Balfour, of Edinburgh, in the *Edinburgh Medical Journal* for December 1871, *Medical World*, N. Y., May 1872, or *Braithwaite*, July 1872. See also *British Medical Journal*, 25th of February, 1871.

her for three or four weeks. She presented the usual symptoms of a rapidly progressing case. Under two month's treatment with a diet devoid of nearly all amylaceous principles, using flesh, milk, and Camplin's bran biscuit, with the use of ordinary remedies she had in so far recovered as to be able for a time to attend to her household duties, and was otherwise active. While thus improved, she was urged to still further improve her condition, as she seemed to have stopped gaining. Falling into the homœopathic delusion and coming under the care of a certain practitioner of that so-called system in Toronto, who promised, without at all restricting diet, to cure her by very small and easily taken white soluble powders, and stated that he had cured every case treated by him, with a single exception, she began this treatment with enthusiastic faith. Under it from the latter part of November 1871 to the 10th of January 1872, she gradually grew weaker. The specific gravity of the urine was for a time considerably diminished. It previously ranged from 1.029 to 1.038. On the 10th of January the quantity of urine was sixteen pints, sp. gr. 1.033, abundance of sugar; emaciation, excessive thirst, and weakness so great as to require help from cutter into my office; distressing pruritus vulvæ.

At the recommendation of my esteemed friend, Dr. C. Archibald, of Toronto I determined to give Cantani's treatment a trial and pending the arrival of a supply of lactic acid, ordered abstinence from starch and sugar with the use of Camplin's bran cakes (which by the way can be made fresh, and moderately palatable), with the use of the effervescing citrate of ammonia containing in each dose grs. v of Ferri et Strychniæ citras, *ter die*; also gr. $\frac{1}{2}$ pul. opii. after each meal with gr. *j* *hora somni*, and an antipruriginous lotion. In three days, when the acid had arrived, strength was much improved, quantity six pints, sp. gr. 1.031 $\frac{1}{2}$, abundance of sugar by Moore's test, pulse 96, respirations 21, weight 116 pounds.

In this condition she began taking the acid 13th Jan. f 3 *j* *ter die* in water with a rigidly meat diet. 14th Jan. the acid *seemed* with each dose to produce severe pains in loins and limbs; gave an opiate, quantity five and a half pints in the last 24 hours, during which has drunk only six tumblerfuls of water, three of which were at meals, and contained each a dose of the acid which forms quite a pleasant sour drink, quite as palatable as dilute lime-juice. Sp. gr. of urine 1.032, which, on being tested for sugar by Moore's test, did not

exhibit the yellow color until boiling began, this yellow changed to brown, but the color was much less marked than on any previous occasion, the urine being translucent in the test tube. After standing a slight cloud was precipitated. Hitherto the liquor had always been too turbid to observe any such cloud if present. 15th Jan. quantity during last 24 hours is $4\frac{3}{4}$ pints, sp. gr. 1.018 with sugar very small. The urine presents the normal amber tint, while before it was pale and presented the appearance of stagnant water. Each dose of acid seems to induce severe pains, as before. Acid to be continued in warm tea, ordered a mixture of opium and aconite to be taken *pro re nata*.

16th Jan. quantity $3\frac{1}{2}$ pints, sp. gr. 1.019 $\frac{1}{2}$, sugar as yesterday, pains much less, has a pain in back and leucorrhœa. Has drunk in 24 hours only four tumblerfuls of fluid including the tea in which the doses were taken. 17th Jan. sp. gr. 1.020 $\frac{1}{2}$, pulse 90, respirations 20, no pains to-day, quantity 4 pints, slightly more sugar. 18th Jan. sp. gr. 1.017, sugar about as on the 15th, pulse 102, respirations 22, quantity 5 pints. 19th Jan. sp. gr. 1.025, quantity about $3\frac{1}{2}$ pints.

20th Jan. sp. gr. 1.030, quantity not more than 3 pints, decidedly acid, discoloration a shade deeper than before. Has lost two pounds in weight during her first week's treatment. 21st Jan. sp. gr. 1.032, sugar increased, about 4 pints, an opiate had been taken to relieve diarrhœa. Slightly weaker during the last few days. While awaiting a new supply of acid, ordered same treatment as on 10th, resuming acid treatment on 24th, with a simple cough mixture owing to occurrence of a slight bronchitis. 26th Jan. sp. gr. 1.031, ten pints of pale urine, sugar small, pulse 105, respirations 28, temperature 100.2°, weight 114 lbs, pains caused by the acid comparatively slight.

28th Jan., feels much stronger, has been out to church the first time in five weeks, quantity 5 pints, sp. gr. 1.037, pulse 88, respirations 24, temperature 99°. Has taken a grain or two of pulv. opii. each day for the last two days. 31st Jan., quantity 11 pints, weaker, complains of pains in back, shooting from lower dorsal region around the abdomen and down the thighs, sp. gr. 1.032, hypodermic injection of morphia and atropia, and ordered some anodyne mixture as on the 15th. 1st Feb., much better, "feels first rate," sp. gr. 1.036, sugar about the least exhibited since beginning treatment, quantity 5 pints, pulse 95, respirations 23, temp. 99.7°. Marked improvement such as shown to-day was afterwards found to occur regularly after a similar subcutaneous injection. After a few days

further trial of the acid it was abandoned. During this time had been on a diet of mostly beef with fresh fish. Occasionally took one of Camplin's biscuit broken into skim milk.

For some time, about a month, treatment consisted mainly in avoidance of amylaceous foods, with the use of Tr. Ferri mur., strychnia, digitalis, oleum morrhue and opium principally. The patient, of weakly constitution naturally, did not, I think, get out of the house, although at times almost able, but prevented by severity of weather. Strength and quantity of urine varied, but not to any extent deserving note. During this time tubercle deposited in the lung made itself manifest.

Feeling that the result I had obtained was not as favorable as had been observed by others, and supposing this difference of result might be due to the acid, I was urged by the eager anxiety of my patient to try acid from a different wholesale house. A fresh specimen was accordingly obtained from Evans, Mercer & Co., Montreal, whereas the first specimens were furnished by Lyman Bros. & Co., Toronto. Under its use the quantity of urine still kept as small as while under the remedies given in the last paragraph, varying from three or four to about seven pints in each 24 hours. The sp. gr., which throughout the case never went above 1.038, ranged from 1.024 to 1.036, with an average of about 1.031. On one occasion, however, it went down to 1.018, with a very small quantity of sugar. The physical strength was maintained pretty well. This was continued for about five weeks, when it was evident that although it was quite adequate to produce and maintain improvement and even to diminish the quantity of sugar to a minimum as compared with every thing else tried yet the improvement was not progressive and continuous. The fluctuations were not very markedly different from what they were at other periods. The amount of sugar excreted per week was, I think, not more than one-half what it was under other treatment.

During the last month of life consumption made rapid progress, and the case was under palliative treatment. Death occurred on May 4th.

CASE II.—A married lady, æt. 33, the mother of several children, who had been suffering for about eight months from *diabetes mellitus*, and was put upon Cantani's treatment. The dietetic restrictions were, I think, pretty rigidly carried out, and the treatment continued

for five or six weeks. The benefits obtained by using the acid were greater in this case than in the other. Before beginning the acid the specific gravity ranged from 1.040 to about 1.044; under it, from about 1.030 to 1.040, with great but not continuous diminution of the amount of sugar. The quantity of urine was small, four or five pints per 24 hours. The strength and spirits returned, the color improved during the first two weeks treatment, and this improvement was maintained during the remainder of the time. It was evident however, that a suspension of the treatment would permit the physical depression to return, and hence it could not be at all called curative. Hence it was abandoned. Under other treatment this case made a more decided improvement. She died on Aug. 6th, from what, I presume, to be obstruction of the bowels, after a very brief acute illness. As her residence is beyond the limits of my visiting practice, I did not see the case to this termination.

Commentary.—I infer that the administration of lactic acid to the amount of three or four drams per day, has some decided power over the disease. It will diminish the secretion of urine, lessen the amount of sugar *at the same time* and along with it the specific gravity. Also the symptoms immediately dependent upon the march of the disease were all ameliorated. Beyond this remarkable power over diabetes it is doubtful in my mind if it has reliable curative power. If the reader will examine Cantani's treatment he will see that it is predicated upon rational principles. It is to be hoped that further investigation, rationally and not empirically conducted will lead to better results in this hitherto unmanageable disease. I may say that I do not think so highly of the treatment as to have placed a third case which has since occurred in my practice upon it. Both qualities of acid were used, the syrupy in consistence and that of watery consistence. Its expense, about \$5 per pound wholesale, is a bar to very prolonged trial of it.

I may add that the pains produced by the acid apparently in the first did not occur with the second. They did not occur in the first case either with the acid obtained from Montreal. On one occasion only was the pain in the first case described as being in the knee-joints for a day. I observed nothing analogous to the phenomena of acute arthritic rheumatism which other observers have noticed.

GUN-SHOT WOUND OF ABDOMEN—BULLET PASSED PER ANUM—RECOVERY.

UNDER THE CARE OF DRS. BETHUNE & FULTON, TORONTO.

(Reported by L. F. Lennox, Medical Student.)

M—L, æt 34, native of Newfoundland, and a carpenter by trade, was wounded on the 29th day of July by the accidental discharge of a "Smith & Weston" revolver. He and his brother were sitting on the edge of the bed early in the evening after they had quit work and were handling the revolver, which he was showing his brother, under the impression that all the cylinders were empty. The brother who had the weapon in his hand raised the hammer, and in letting it down the contents of one of the cylinders exploded, severely wounding the unfortunate patient; the bullet passing through the fleshy part of the fore-arm near the elbow joint, and just external to the neck of the radius, and then entering the abdomen a little below and to the right of the umbilicus. He immediately got up and walked down stairs and laid down upon a sofa, and Drs. Fulton & Bethune were sent for. There was very little shock with the exception of slight pallor of the countenance and considerable excitement. Pulse about 86, full and regular. Dr. Fulton was the first to arrive. He made some inquiries regarding the nature of the injury, the time at which it occurred, and the position of the patient when the accident happened. He then proceeded with a probe to search for the bullet. The wound was very carefully examined, but no trace of the bullet could be found, not even an opening into the abdomen. The conclusion was therefore arrived at, taking the condition of the patient into consideration and other circumstances of the case, that the bullet was lodged in the right rectus muscle, and would probably become encysted. Dr. Bethune arrived shortly after. He also examined the wound, but could not find any opening. The wound was then slightly enlarged and further search made, but with similar results. The wounds were dressed with cold water dressing, the patient ordered to be kept perfectly quiet, and about twenty minims of Liq. Opii Sed. were administered.

30th,—morning.—Patient tolerably comfortable; but slept very little during the night; considerable anxiety; pulse about 90; com-

plaints of a good deal of tenderness in the abdominal wound, *Liq. Opii Sed.* continued ; to have no solid food ; ordered Beef-juice ever four hours.

Evening.—Complains of twitching pains in the right rectus muscle ; face slightly flushed ; pulse about 96 ; countenance anxious ; vomited some greenish colored fluid ; treatment continued.

3rd,—morning.—Tenderness on pressure, especially in the right side of the abdomen ; every movement of the rectus muscle attended with severe pain ; vomited once or twice through the night ; takes very little nourishment, but is very thirsty ; tongue coated with a white fur ; pulse about 100 ; slight tympanitis, and patient complains of fulness of the bowels, and wishes to have a cathartic. To this the Drs. objected, but ordered an enema of soap and water ; hot fomentations and subcutaneous injection of morphine over the rectus muscle ordered.

Evening.—Pulse 104 ; skin hot and dry ; tongue furred ; general condition much the same as in the morning ; wound in the abdomen discharging a little. The wound in the arm looks well.

The following mixture was then ordered *R* :—*Pot Nitras grs, xxx ; Tr Hyoscyami, 3 iij. ; Liq Opii Sed, 3 ij. ; Aqua ad, 5 viij. Sig. A* tablespoonful every four hours.

August 1st.—Patient easier ; rested some during the night ; pulse 100 ; tenderness subsiding ; stomach not so irritable ; bowels not much distended. Poultice applied to the wound in the abdomen.

2nd.—Rested well during the night ; pulse about 90 ; tenderness nearly gone, except in the immediate neighborhood of the wound ; poultice still applied ; treatment continued.

3rd.—Still improving ; patient in better spirits ; bowels acted without any interference ; stools very dark colored and offensive ; pulse 90 ; skin moist.

4th.—Pain almost gone ; pulse about 85 ; patient quite comfortable ; cautioned against attempting to get up. To have Quinine mixture.

5th.—Patient much better ; pulse about 80 ; no pain or tenderness ; tongue commencing to clean at the edges ; to have more nourishment.

7th.—Patient now visited every second day ; improvement rapid ; Quinine mixture continued.

9th.—Moved out on the sofa to have the bed made ; complains of weakness, but is doing well.

10th.—While evacuating his bowels this morning, the bullet passed *per anum* to his great delight and astonishment, and in two weeks' time he was able to be about and attend to business.

ON THE EXHIBITION OF CHLOROFORM.

BY A. B. ATHERTON, M.D., L.R.C.P. & S., (EDIN).

A few observations from the leaves of my experience in regard to this subject may not, I hope, be uninteresting to the readers of the CANADA LANCET.

In administering Chloroform, it is of course important to see that no article of clothing constricts the neck or prevents free expansion of the chest, while we direct the patient at the same time to assume the supine or reclining posture. I once saw a surgeon give it to a person sitting astride a chair and leaning his chest against its back. It was not long before respiration ceased, and it was with difficulty re-established.

It is well also to assure the patient that there is little or no danger, and that he will bear it all the better if he does not get nervous or frightened. I generally direct him to take long deep breaths through the mouth, and to close his eyes in order to prevent irritation of the conjunctivæ. By breathing through the mouth I think one gets less of the choking, smothering sensation, because of the sensitive powers of the nasal organ not being called so much into play. To ensure a speedy and pleasant effect it is necessary not to push it too much at the start, especially if our patient is afraid, and it is his first inhalation. Under such circumstances, undue haste will only cause alarm, and lead to the use of more resistance than will be either agreeable or safe to ourselves. Sometimes a patient will struggle to remove the towel from the face in order to clear the mouth of mucus and saliva. This it is well to allow, and then he will quietly permit you to replace it. At other times I have found that when the continual presence of the chloroform close to the mouth is resisted, its removal during *expiration* will ensure a quiet and full inspiration, during which it may be brought near again. After a few inhalations there will be sufficient insensibility to admit its free exhibition.

Now and then we meet with one, who, in the first stage of anæsthesia, stops breathing altogether; to a great extent I think voluntarily on his part. This will generally be remedied by some rather rough handling of the tender part on which we are to operate, or if there is none such, by giving a sharp pinch or a good shake. Instead of doing this I have seen Physicians remove the chloroform and shout to him to breathe; to which he pays not the slightest attention till it suits himself. In this way chloroform may be wasted as well as much time.

When the loud breathing begins, and the muscles of the arm begin to relax, it is time for work. And here I would remark that it is amusing to see with how much anxiety and concern some practitioners will hold on to the pulse to see how the heart beats, instead of giving their whole attention to the respiration. I recollect this leading one of my friends to think my patient was gone, because he was lying partly on the arm in which he was feeling the radial, and because this pressure of his body, entirely stopped its pulsations. It may be well to feel the pulse in cases of heart disease, but it is certainly needless in ordinary ones.

In the last stage of anæsthesia we often get, as every one is aware, that loud stertorous breathing and its occasional cessation which gives us not unnecessary alarm. In this condition the following simple expedient has often served me well, and I think will obviate that cruel method of seizing the tongue with forceps and dragging it forwards which I have seen practised. By taking hold of one or both sides of the mouth with the thumb and fingers, and drawing well forwards, we can generally (if not always) bring forwards also the lower jaw and with it the tongue, so as thus to raise the epiglottis and permit the air to flow freely in and out of the lungs.

It is not enough that we simply hold apart the lips so as to open the buccal cavity, nor yet is it proper to draw its sides at the same time *backwards*, which I think retards rather than assists in bringing forward the tongue, and thus raising the epiglottis which is the point to be aimed at. Sufficient room will generally be secured for entrance of air without forcing the jaws apart.

With regard to the use of chloroform in labour, by attending to the direction of the late Sir J. Y. Simpson, namely, to give it only *during* the pains, there is little danger of producing any of its dangerous symptoms; neither is the patient as apt to vomit afterwards as in its ordinary use in other circumstances.

It acts like an opiate in getting rid of irregular and useless pains and allowing better ones to come on in their stead. In other cases, where pains are going on well and the female is aiding them greatly by expulsive efforts, chloroform, especially if given freely, will not only to a large extent do away with the voluntary force exerted by the abdominal muscles, but will also diminish the frequency and force of the contractions of the involuntary muscular fibres of the uterus itself.

As soon as the head of the child is born, of course the chloroform should be removed; and I would say even a little before this, so as to allow the uterus to regain more completely its power to contract upon and expel the placenta after complete delivery of the child, for I can't help thinking that we are more apt to get *post partum* hemorrhage after the use of chloroform than where we do without it. After chloroform I am therefore particularly careful to follow down the uterus as it expels the child, and keep it contracted by pressure and occasional friction through the abdominal walls.

GLEANINGS FROM MY NOTE BOOK.

BY T. R. DUPUIS, M.D., F.R.C.P. & S., KINGSTON.

The following cases are not reported because they contain anything uncommon, or because I think that they reflect any credit on me as a surgeon; but simply as additions to the number of cases slightly removed from every-day occurrences, and as records of my own field of observation, I give them to the world:

CASE I.—REMOVAL OF A PEBBLE FROM THE EAR, AFTER HAVING REMAINED THERE THREE YEARS.

Miss J., æt 12, was brought to my surgery on the 19th of August last, to have a little stone removed from her ear, which her grandmother, who came with her, stated had been there for three years. The stone could not be seen distinctly, but on passing a probe into the ear it immediately impinged upon it. The child was so timid that I had to administer chloroform to procure an examination.

This was made by means of a speculum, and the stone was discovered completely blocking up the meatus externus at about

its middle. Careful probing then discovered a very small opening along the upper side of the stone and a little posterior to the middle line. The stone was so firmly imbedded as to be completely immovable, and this very small opening was the only passage into the deeper part of the meatus.

To extract it was now the difficulty. After several attempts, I succeeded in forcing a small scoop through the opening, and managed to get it to retain its hold upon the stone. All the force I dared to use, and this was all my instrument would bear, failed to move it in the least. I then called in Dr. EVANS, whose office is next door to mine, but he also was unable to accomplish anything.

Fine forceps, with scoop-like points, were tried, but could not be got beyond the stone, and a wire snare was met by the same difficulty. The grandmother of the patient would not then agree to an operation for cutting it out, and we had to abandon in despair any further attempt. I prescribed a little carbolated oil to be dropped into the ear, and the meatus to be kept filled with wool—this to be removed occasionally, and the pus, if any, to be washed away with a gentle stream of warm water, and the dressing again applied.

On the 19th she was brought to me again. I then had another surgeon in consultation. The patient having been put under chloroform, the end of the stone could be distinctly seen through a speculum, though still occupying its former site. We were, however, able to introduce a larger and stronger scoop than before; the opening having evidently enlarged. But by all the force we dared to use we were unable to extract it; we succeeded only in breaking a small chip off the outer edge of the stone. We were compelled again to desist from further attempts by the uselessness of our efforts. My friend declared that he hated to give a case up, but said he felt satisfied that it could not be removed without splitting the meatus. This, as before, would not be permitted, and the decision was to let the stone remain.

The ear bled freely, and I apprehended much inflammation, so I ordered the former treatment to be continued, and if much pain occurred, a poultice to be applied, and prescribed Sol. morph. sulph. in quantities sufficient to procure rest.

On the 24th she was brought back again, with a very offensive

smelling discharge from the ear, but the inflammation and pain mostly gone, and the stone occupying a position more external than previously. With the patient under chloroform again, I was able to pass my larger scoop with ease, and to embrace in its concavity the inner end of the stone, which, by moderate traction, I succeeded in withdrawing. Treatment to the ear as before, and in about ten days the patient was perfectly well, excepting partial loss of hearing in that ear.

The pebble was over half an inch in length, nearly cylindrical, and over a quarter of an inch in diameter. What struck me as peculiar, was the length of time it had remained without causing more disturbance in the parts, the firmness with which it was held, the enlargement of the meatus as the effect of our manipulations, and the amount of interference the ear sustained without damage.

Whether our conservative surgery was best or not, I am not prepared to say, but it certainly accomplished the desired object. Had I been allowed, I would have enlarged the meatus sufficiently to have grasped the stone; still, I have learned from this case, that a body like this stone, if not removable by the first attempt, may become so by several consecutive ones, on account of the softening of the parts, and enlargement of the opening which may be produced by forcible dilatation.

CASE II.—REMOVAL OF A CALCULUS FROM THE “FOSSA NAVICULARIS URETHRÆ.”

On the 19th of September last I was telegraphed for to go and visit a patient about 22 miles from my office. I left home at 5 P.M., and going with my buggy for about 18 miles, and in a small boat along the Rideau Canal the remainder of the journey, reached my destination about 9 o'clock, P.M. My patient, a strong muscular man, about 50 years of age, I found suffering from retention of urine; he had voided scarcely any for about three days, and the distention of the bladder was the greatest I have ever witnessed; being nearly as large as a full-sized pregnant uterus. The poor fellow was nearly exhausted, and his friends were expecting to see him die.

Examination at once revealed a firm tumor in the glans penis, and the point of the catheter impinging upon it declared it to be

a stone. As it was situated in the fossa navicularis, I was able to crowd the catheter along side it into the urethral canal, which was so distended that the instrument seemed to touch nothing but the stone, and urine began to flow from it as soon as it was well into the canal. It passed readily into the bladder, and about three quarts and a-half of urine (measured by the imperfect measure at hand) escaped. The most urgent necessity being then relieved, I next removed the gravel.

This was done by holding the penis firmly between the thumb and finger of the left hand posterior to the stone, to prevent its being pushed back, and then with the right passing a deeply concave scoop beyond it. The meatus being unusually small, it was impossible to pull the stone through, so I inserted a narrow curved bistoury till its back came in contact with the stone, and then drawing it directly outwards, enlarged the opening at its upper side sufficiently to admit its passage. Considerable hemorrhage followed for so small an operation, but it was easily controlled by inserting into the urethra a small roll of cotton, compressing it with an external bandage, and applying cold water.

Considerable constitutional irritation followed the immense distention to which the bladder was subjected, and the amount of pain endured, but these passed away in a few days, and the patient is now well. The calculus was of the mulberry variety, quite jagged, and about the size and shape of a common sized white bean.

The manner in which it was wedged into the narrow meatus by the *vis a tergo* constituted it the most effectual plug imaginable, and so completely prevented any passage of urine, that bursting of the bladder must have followed in a very little time longer, had he not been relieved.

CASE III.—FRACTURE OF THE SKULL, WITH CONTUSED WOUND OF THE BRAIN.—RECOVERY.

J. L., a school teacher, æt. about 30, was, on the 16th of August last, exercising himself by assisting to store hay in his father-in-law's barn. They were using a large "horse-fork," and some part of the fixtures breaking, an iron pulley which was attached to a rafter, fell, and striking him upon the head, inflicted

a wound upon the left side just in front of the parietal eminence. The cut seemed to have been made by an obtuse edge, was about an inch and a half in length, and extended through the cranium and into the brain for the depth of about half an inch. The patient was insensible for a time, but owing to the profuse hemorrhage the stupor was of short duration, so that when I first saw him he was quite sensible. The broken pieces of bone were removed, as also a piece of his hat which was driven into the wound; there was some loss of brain substance and considerable bleeding. The patient was placed in bed with his head elevated, a folded piece of cotton wet with whiskey and water, cold, applied to the wound, and small doses of magnesia sulph. given at intervals of two or three hours till the bowels were freely opened. The patient had no bad symptoms, quietness and low diet were enjoined, and after a couple of days, tepid water dressing was substituted for the whiskey and water, and a little carbolated oil applied to correct fetor. This application softened the clots, and procured a very fine discharge of disintegrated brain mixed with grumous pus.

As soon as this discharge subsided, I prescribed ceratum resinæ to be spread on cotton, and kept constantly applied; under this remedy the pus acquired a healthy character, and the wound began to heal. Some trouble was experienced with fungoid granulations springing up from the bottom of the wound, having the character of encephalocele. Several free applications of nitrate of silver retarded this growth, and corrected the tendency to it, so that the edges of the scalp were enabled to unite.

To-day, Oct. 12th, the patient presented himself in my office with the wound all healed except a very small spot, and this was covered by a dry scab. The site of the wound presents a marked depression, which of course yields readily to pressure from the lack of cranium beneath.

The patient has, however, made a good recovery, and has for some time been able to attend to his professional duties, and to write poetry and theological disquisitions.

This case is another in the records of brain-injuries, which go to demonstrate the perfect curability of that class of lesions.

A FEW WORDS TO THE ECLECTIC BODY.

BY JOHN MUIR, M.D., MERRICKVILLE, ONT.

On the occasion of the last meeting of the Ontario Medical Council, a discussion arose in reference to a proposed diminution of the number of representatives, and a change in the membership of the Central Examining Board. In the course of the debate, Dr. Clarke said "he had reason to believe not a few of the Eclectic members of the College would be willing to merge in the general profession, and that there was, in his opinion, but little difference between that school and his own, in matters of practice." Allusion was also made to the fact that, we had not, for several years, had any accessions to our ranks. In replying, I stated, "I was not in favor of reducing the number of representatives, the Medical Council being now of no more than respectable dimensions for a Province of the extent and importance of Ontario; and that there was a material difference between our systems—particularly in regard to venesection and the employment of inorganic remedies. Yet, I could not but acknowledge that the distinction was daily becoming less. Many agents which a few years ago were peculiarly the property of our school, are now extensively in common use; and if in the future, our friends opposite continued as active in their appropriation of articles from our *Materia Medica*, it really seemed as if the day might not be very far distant when we should all be Eclectics—in the sense of Dunglison, when he said that "every judicious physician must necessarily be Eclectic." The position, however, of the Eclectic body, under the existing Medical Act, could not be deemed a satisfactory one. At the annual examinations no students had, as yet, presented themselves. Even the sons of our leading men,—of our representatives in this Council,—declined declaring themselves adherents of our system. Various causes operated to produce this result, but the most potent reason was no doubt the fact that, in Canada, no special educational provision had been, or could be, made for them. It was much more convenient, and less expensive, for our young men to put in all their terms at one or other of our Canadian institutions, than to divide their period of study between a home college and one located in a distant American city. As things were proceeding at present, the extinction of the body was only a question of time, and that not a very remote time either. In view

of this, it was not to be wondered at that some of our members fully recognizing the situation, felt disposed to accept the inevitable ; and were already discussing among themselves the propriety of fusion with the general profession. One thing was certain, the working of the Ontario Medical Act was having a fatal effect on all our efforts in the direction of perpetuating our sect." As illustrative, moreover, of the views of some of our best men, I read the following extract from one of several letters received during the late election contest :—" Names now convey no essential difference in principles, as every medical teacher of eminence, whether of the old school or the new, has abandoned depressants as therapeutic agents. What we require is professional knowledge to gain general assent to the pre-eminence of our principles. * * Some candidates for Council honors announce their determination to insist on a repeal of the clause requiring two sessions in Canadian institutions. Our interest in every respect is to shut out those who are too lazy to properly qualify. My own students pass without reference to creed, and practice that system they conceive to be right. I have one son legalized from the Toronto School, and another, (who matriculated last fall before the Council Examiner,) will take his first session at Trinity, next fall—both uncompromising votaries of the Medical reformation. But, they can fight to better advantage within the ring than they could without. We ask no favors, and only require an open field and fair play. Education is an indispensable pre-requisite to professional success, and no one should be encouraged to enter upon a learned profession without it." The foregoing, as near as I can recollect, gives the substance of what passed ; and I now recapitulate it merely to correct any erroneous impressions which may have gone abroad through the very imperfect report of the debate which appeared in the daily journals at the time. Dr. Cornell expressed himself to the same effect ; Drs. Bogart and Morrison considered the discussion premature ; Dr. Carson was absent. Subsequently, your representatives met in conference on the subject. There was no difference of opinion amongst them as to the certainty of our ultimate obliteration. On a consideration of the advisability of moving in the matter at all, it was, after mature deliberation, decided that the case in all its aspects should be laid before our constituents, and their views demanded for our guidance ; and the understanding was also arrived at, that the wishes of a majority of

those we represent should govern our course. The duty of communicating with the registered practitioners qualified under provisions of 24 Vict., cap. 110, was at the same time thrown upon the undersigned; and he now, at the earliest possible moment, endeavors to discharge it.

Under the old management, which empowered Boards and Colleges to license practitioners, every year witnessed some small addition to our numbers. At that time the standard was, of course, not as high as it is now, and part of the four years required by the then Medical Acts was often put in after a fashion which would not now be tolerated. Young men ostensibly entered on study with the medical men nearest their homes; and, while their time was thus made to count, engaged in other business during a good portion of it—school-teaching being the favorite avocation so selected. They thus earned money, and complied with the Act simultaneously. And this feature was not peculiar to any school. Students of every one of them, more or less, sought to eke out slender means and economize time in this manner. There was no preliminary examination at all. Then the fees of the United States Eclectic Colleges were small; and with no double graduation system such as now obtains, it was neither so inconvenient nor so expensive to procure the licence as it is under the new law. The full effects of the present Medical Act I scarcely think were anticipated by its most active promoters. Having no Eclectic College in the country at which our students can conveniently acquire the distinctive features of our system, they are handicapped, as it were, with the cost of distant travel, and heavy burden of living in remote American cities. For, this they have to undergo, in addition to the training of a Provincial "General" School. Is it at all astonishing that our young men seek graduation on less expensive and more easy terms, and finding it infinitely less troublesome to take all their sessions at home, decline qualifying for the special examination? I do not mean to say that the considerations specified are the only ones which weigh with students. We all know the extent to which the young men are affected by their surroundings. While studying at hostile Canadian Medical Schools, they could scarcely fail to imbibe something of the spirit of their teachers and associates—a spirit certainly not favorable to the propagation of sectarianism. Then the "General" School has all the attractive prestige of legitimacy, with a long honor roll of illustrious

names which cannot but impress with awe the youthful scholar; and last, but not least, there is a social element of caste in the case, against which it is hard to fortify him. For, with the bulk of the people he encounters, the so-called "regular" practitioner is the only one entitled to take rank as a physician; and young men are often very sensitive, and shrink from adopting a designation which they find many persons regard in the light of a badge of inferiority. Be all this as it may, one thing is beyond uncertainty—*not a solitary student has presented himself* since the new act came into force. Year after year, your representatives have gone through the solemn mockery of appointing special examiners; thereby making provision for a contingency which has never arisen, and which it is only too apparent, under prevailing disadvantages, never will arise.

From 1861 to 1869 our Board existed, and as the results of its labors, there figure now upon the Ontario Medical Register for 1872 the names of one hundred and eight legally qualified practitioners. And here it may not be out of place to notice the good work this Board accomplished—not only for its own adherents, but for the profession in Ontario. By obtaining the passage of the Act of 1861 authorizing its existence, legal recognition was assured; and when the members of that Board, with a laudable regard for the claims of higher medical education, assented to a union of the several bodies under the present Act, they stipulated for perfect equality before the law, and that every member of the contemplated College of Physicians and Surgeons should be wholly untrammelled—free to practice medicine in accordance with whatever system he conscientiously considered most conducive to his patient's welfare; that, in fact, no man should suffer obloquy professionally, or be subjected to ostracism merely on account of therapeutical differences of opinion. That the character of the men too, constituting the following which the Board brought to the new alliance was a generally creditable one, is amply manifest. Though many of them have not registered all the "additions" they might, we know that among the 108 appearing on the Register are not a few who possess much higher educational qualifications than, in every instance, is there apparent. Such reputable institutions as the University of Toronto; Royal College of Surgeons, Kingston; and the University of Victoria College, have graduates among our numbers; while several of the better-grade of American medical schools are very largely represented: Jefferson College,

Philadelphia, Pa. ; Hobart College, Geneva, N. Y. ; University of Michigan ; College of Physicians and Surgeons, New York ; Syracuse Medical College, N. Y. ; Long Island Medical College, N. Y. ; University of Buffalo, N. Y. ; University of Vermont ; Castleton Medical College, Vt. ; University of Pennsylvania, &c. Returning to our subject, however, there are but two sources of augmentation open to us :

1st. Students who pass the Special Examination and the Central Board.

2nd. Converts from the other Schools.

From neither of these have we had a single addition since 1869. We are subject to losses from the following causes :

1st. Deaths.

2nd. Permanent removals from the Province.

3rd. Retirements from practice.

4th. Withdrawals.

I have stated our strength nominally on the Register at 108 ; but have no doubt that were the Register to put in force Sec. 21 of the Medical Act not more than 80 would report. In other words, I believe that during the past three years, from foregoing causes, we have lost 28. There were only 53 votes polled at the election in June last. Thus then stands the case : we are daily decreasing—the general profession gaining. As we dwindle into insignificance the opposition gathers power and volume ; and with their continually swelling growth and importance, a re-adjustment of the representation in the Council cannot very long be deferred. As compared with the “general” section, it must be admitted, in all fairness, that our representation is excessive. Having regard to the interests of our body, what, under the circumstances, had we better do ? Shall we wait until our numbers are so reduced that the small remnant left will be alike impotent to favorably impress the public or protect themselves ; or make such an arrangement *now* as shall secure them a greater degree of consideration, and enable them to exert a modifying influence on the medical practice of the Province of Ontario for all time to come ? Or, shall we struggle for a restoration of the old Board ? In the latter event, even if we succeeded, so committed are we to the elevated standard, and to an exhaustive general examination by disinterested parties, that we would not be one whit better off than at present. A separate Board, for our

specialty we might obtain ; but in reference to the subjects common to all schools, the same examination as is current now would be insisted on ; and, for his eclecticism, the student would still have to fall back on the U. S. Schools. So far as Canada is concerned, with no Medical College of our own within the limits of the Dominion, it is altogether impossible we can hold our own, much less make progress and increase in strength. If I am correct in my effort to comprehend the arguments of those, on our side, who favor merging in the general profession, the case stands about thus : They realize our powerlessness in the direction of extension as an independent sect in the Province ; but they have an abiding faith in the good which even a small number of faithful, earnest men, can achieve who make the most of their opportunities. This they contend we have not done. They consider the policy of persistent isolation hitherto maintained, has been a grave mistake. The knowledge of our methods is wholly limited to ourselves, and will die out with us. Contact with the old school has not been cultivated. Its members know literally nothing of our modes of procedure, or the principles on which we profess to act—nor will they ever acquire that knowledge if we keep them, as we have, at arm's length. Those of our number too, who favor fusion, consider that some of us have urged distinctive doctrines after a fashion more likely to repel than to attract—have shown ourselves more in the character of the narrow-minded sectarian bigot, than in that of the liberal scientific professional man ; and this has interfered seriously with affording us the necessary opportunities for exhibiting to the best advantage the results of our system. They instance the fact that while a few of us have been gazetted as Coroners, the Active Volunteer Force, the Militia, and Hospital, Asylum, and sanitary appointments, from our unconciliatory attitude, never fall to our share. They claim that in view of our patent condition of decay, the term Eclectic on the Register is calculated to degenerate into a mark of degradation as indicating the adherents of a body which could only obtain recruits under a lower standard of education, and secure perpetuation under a lax administration of legislative enactments. It renders them liable, at all events, to the humiliation of being annoyed by importations at the hands of those who do not take the trouble of informing themselves of the causes which have produced the state of matters we deplore. The parties, whose views I am endeavouring to interpret,

assert that the further battle of Electicism here, must be fought out amicably at the bedside—that only by the demonstration of a diminished death-rate can we hope to obtain extended recognition ; and by imparting a knowledge of the means we use to those who are so largely in the majority can we ever expect to very greatly benefit the people among whom we labor, or leave a lasting impress on the treatment to be meted out to them in future years. The conversion of their adversaries into allies is what they appear to aim at ; and certainly, this has an aspect of plausibility, as being an object worthy of every legitimate effort, and the only seeming direction, as things go, in which we have any likelihood of proving effectively aggressive.

On the other hand, the leading members of the general profession who are advocates of closer union, do not seem to be simply animated by an anxious desire for our instant extermination. Kinder feelings prevail. Intercourse in the Council, and to a limited extent, professional contact, but above all, the active aid and co-operation we have always afforded the College, in every effort having for its object educational advancement, has led to a better sentiment on their part. It is very evident they do not now regard us all in the light of illiterate medical guerillas, as, at one time many of them, no doubt, did. There may be some ungenerous enough to mock at our present strait, but they are few in number, and comparatively uninfluential. The members of the general section have no reason to find fault with us. We have met them more than half way in every measure projected for the benefit of the profession at large. And we have done so at a sacrifice much greater than could have reasonably been anticipated, and which should place us greatly beyond the reach of taunt, or sneer, or cavil. So far as I have been able to learn the views of “general” representative men, in relation to the matter under consideration, they appear to amount to this : The exercise of a little patience, on their part, they discern, will, without any action whatever, bring about our gradual extinction. The tide of time alone will inundate us. Of this they state they are aware, and that they favor union *now* from no mere eager haste for our annihilation. A loftier motive influences them, and one too in which we should be sharers. Ever since the organization of the College of Physicians and Surgeons of Ontario the aim of every one connected with it, has been its advancement to the highest possible position. The examinations have been made thorough, and the curriculum extended,

until now we can truthfully claim, in the language of its worthy President, that "the standard of the College of Physicians and Surgeons of Ontario is higher than that of any licensing body in the world." Such being the case, the standing of the holders of its diploma ought to be undoubted—they should, in fact, outrank all others. But do they? Not by any means. The presence on the Register of sectarian designations, and the provision made in our Medical Act for special examinations, operate to the detriment of the possessors of the diploma of the College. Our apparent attempts at blending incompatibles are wholly incomprehensible to the minds of medical educationalists everywhere. In Europe, the United States, and even in our own sister Canadian provinces, the arrangement is viewed with something of disfavor; and, the licensing body presenting the (to them) incongruity, is regarded with not a little distrust. As a consequence, the parchment the College issues carries with it neither the undoubted weight nor the world wide authority it should: still less is it the universally unquestioned passport to the front rank in an honorable and learned profession which we have all sought to render it. The *London Lancet* has been energetically engaged for some length of time in endeavoring to dissuade Jamaica and other more distant British colonies from legalizing it as a qualification; and Quebec and the maritime provinces turn a deaf ear to suggestions of reciprocal recognition, solely on account of the mixed character of our examinations. Of course, by waiting patiently as has been said, time would cure all this. The names on the Register now displaying sectarian qualifications and additions, would gradually disappear; and with their removal all necessity would cease for continuing the feature of special examiners on the Central Board. The more prominent members of the general body acknowledge a very natural anxiety, however, to have all this mature at a sooner day, if possible, in order that persons seeking a qualification from us may no longer suffer from peculiarities deemed objectionable by every medical authority beyond our limits. They say to us "join hands in enhancing the value of the certificate we give. Help us to make it of universal acceptance, and you will be participators in the augmented dignity of the College with which we are all identified. Let us be a unit, really and truly, in so far as the College is concerned; and, if we must differ at all, let it be in the outer field of competitive practice." To this end, they suggest that instead of the

Eclectic qualifications and additions now figuring opposite our names, we should consent to the substitution of "Mem. Coll. Phys. and Surg., Ont.,"—with the year of original registration added ; and that the provision for a special examination, (which no student has ever accepted,) be done away with. This is what they desire, and it now remains to consider the matter as it affects our section—merely premising, that in the ideas presented in the summing up, I give my own views only, for which my colleagues should not in any way be held responsible. Indeed, it is not at all improbable that in some particulars, the tone or matter of this communication may fail to convey precisely what they wish ; and that the whole therefore had better, by the undersigned, be personally assumed. And I am perfectly willing that such should be the case. Whatever the views of our constituents may be regarding the advisability of the steps taken in the past, there can scarcely, from what has been said, be two opinions regarding the effects of the medical legislation in which we have acquiesced. As organized propagandists we are virtually reduced to utter helplessness, and must admit, however reluctantly, that the day of Eclecticism, as a separate entity, in Canada, has passed away for ever. Some of us may talk valiantly of maintaining the distinction in the College, of never giving up, and proclaim their firm resolve to "to hold out to the last" ; but this has an aspect of silliness about it, as being but a bootless contention for the shadow after the substance has departed. Reasonable practical men make the best of any dilemma in which they find themselves placed ; and what such have to do now really is, to scan the situation and determine whether a present or deferred yielding to inexorable fate is better for them. For my own part, I dismiss without a moment's hesitation all consideration of the policy of passive waiting until destruction overtakes us. I know of nothing to recommend it, and can imagine no argument of any weight which can be adduced in its support. By exchanging the sectarian designation for that of the general membership, and relinquishing the special examination, which has proved of no use to us whatever, we certainly augment the value of the diploma held by ourselves and others—for, so long as existing conditions obtain, the College is undoubtedly liable to have its qualification contemptuously rejected as tainted with "irregularity," by even as pigmy a province as Manitoba with its handful of half-breeds. And our doing so involves, in no way, the

slightest abandonment of principle. Over the sectarianism of its members the College seeks to exercise no more control than heretofore. They may publicly announce themselves as practitioners under any system they please, and hold themselves aloof if they shall so decide ; but should a more amicable spirit prevail, on the part of any of them, to such the general profession proffers full fraternization and all the consultant courtesies they extend to one another. The *Canada Lancet* of last month expresses very clearly the views of the majority on this point (page 579.) Its editor emphatically says : "there is no desire to urge, much less to coerce, the Eclectics into amalgamation ; but, whenever the latter are disposed to come in, we will most cordially extend to them the right hand of fellowship." One phase of the situation has not been referred to on either side. The College is maintained, and the current expense of its Council met, by the fees accruing from students presenting themselves. As there are no Eclectic students, it follows we are in the unpleasant position of parties non-contributing. The only students entering an appearance, and, as a consequence, furnishing the necessary funds, belong to the general school. A prolonged struggle for the continuance of a feature which does us no good, and yet depreciates the value of the qualification we furnish, would therefore be a singularly ungracious proceeding on the part of a section, which has ceased, for some time, to assist the College with material aid, in any form whatever. But the question may be asked if we eliminate our distinctive term from the Register and agree to the suggested change in reference to the Central Board, what guarantee have we that, at some future time, ungenerous advantage may not be taken of our acquiescence ? I do not, on this head, entertain much apprehension. The tendency of all modern legislation is decidedly antagonistic to the oppression of minorities, and any attempt to effect a change in our Medical Act affecting its present liberal spirit, would recoil upon, and certainly prove a plague to its inventors. Some arrangement in regard to representation would have to be devised, which would give us due voice and influence in the Council. We could scarcely expect that any of our number would ever be elected from the territorial divisions. As "representatives at large," however, a liberal allowance would, I have no doubt, be made us, in consideration of early alacrity in meeting the views of those who plead with us on behalf of the best interests of the College. But, in

regard to the whole matter, there is no immediate and pressing degree of urgency. The proposals submitted will have to be weighed by the constituency ; and, with a majority of those who constitute our body, rests their acceptance or rejection. The Council meets not again till next July, affording ample time to discuss the question in all its bearings. Whatever that decision may be, the Eclectic representatives will faithfully give their energies to carrying it out.

J. MUIR, B.L., M.D.

MERRICKVILLE, Ont., 30th Sept., 1872.

Selected Articles.

HOSPITAL NOTES AND GLEANINGS.

Cases under the Care of SIR HENRY THOMPSON at University College Hospital :

Pain after the Use of the Lithotrite.—Persistent pain after a series of crushings may be due either to soreness of the vesical mucous membrane or to the irritating presence of a remaining fragment. Sir Henry Thompson pointed out, in reference to the following case, that it is important in any given instance to ascertain, once for all, which of these conditions exists ; inasmuch as a fragment, if there be one, must be removed without delay ; while, if the pain arise from soreness of the mucous membrane, every additional introduction of an instrument is calculated to increase the mischief. Inquiry should be made as to the frequency with which the patient micturates, and as to the occurrence of pain after micturition, and its situation. If any doubt remain, a final and careful instrumental examination should be made ; and for the purpose it is desirable that the bladder should not contain much urine. In the case in point the patient had undergone five crushings for the removal of a uric acid stone ; he complained of persistent pain in the bladder, with pain in the glans at the end of micturition. Having made a general examination of the interior of the bladder with a sound, Sir Henry Thompson introduced a lithotrite, and, having depressed the handle, carefully explored the region behind the prostate with the slightly separated

blades turned downwards. These came into contact with no solid substance, and were brought together without any sense of resistance. On the withdrawal of the lithotrite a very small quantity of powdery matter was found between them. The patient was directed to take a mixture containing liquor potassæ and tincture of henbane each in the proportion of half a drachm to the dose, and to use a hot hip-bath ; and, as a specimen of his urine presented a light deposit consisting chiefly of mucus, the house-surgeon was requested to ascertain whether the bladder was completely emptied by the natural effort.

Painful Ulcer following Ligature of Internal Piles.—Another patient had undergone ligature of some internal piles, and had passed the usual period of convalescence. He complained, however, that the passage of every motion gave rise to agonizing pain at the fundament, and to a long-continued heavy pain in the lower lumbar region. On examination there was found at the spot where one of the ligatures had come away a rough ulcerated surface. So painful was it, that pressure on the corresponding surface of the buttock about an inch and a half from the anus, could scarcely be borne. An incision was made through the ulcer as for fissure of the anus.

Urethral Fever.—There occur from time to time cases in which the passage of an instrument into the bladder is followed by exceptionally severe constitutional symptoms. One remarkable case of the kind was lately under Sir Henry Thompson's care. The patient was admitted with a urethral stricture which was first overcome with a small instrument which was tied in the bladder. During the succeeding fourteen days, instruments of gradually increasing size were introduced and tied in ; the urethra having then recovered its normal dimensions, Sir Henry undertook to teach the patient to pass a catheter for himself prior to his discharge. He gave the first lesson by himself guiding the patient's hand. Rigors, vomiting, and severe febrile symptoms followed this procedure ; the urine became tainted with pus, the intelligence clouded, and the patient's look fixed and stolid ; he could keep nothing on his stomach but a little milk and soda-water. When we saw him on the fourteenth day after the occurrence of this complication, his symptoms indicated only a very slight improvement. In speaking of this and other less severe cases, Sir Henry first drew attention to the absolute immunity from similar complications which is enjoyed by women.

He pointed out that the male urethra is some six inches longer than that of the female, and attributed to that additional extent of surface the greater irritability and liability to a special form of constitutional disturbance which men display in an affection which always presents three stages : cold, dry heat, and moist heat. Frequent examples are afforded of patients who undergo the introduction of an instrument with no apparent impunity, but on their way home a chill is felt, which, with the succeeding symptoms, are attributed to a cold. This complication, Sir Henry said, occurs in various degrees of severity, but seldom does it happen to be so severe as to endanger life, as in the case under observation.

Operation for Recto-vesical Fistula.—To another patient the galvanic cautery was applied to a recto-vesical fistula which had followed an operation for stone performed fourteen years ago. The cautery is applied periodically, and each time its use is followed by improvement. Before the last operation, the patient passed water by the natural passage, but a small quantity escaped into the rectum when he walked.

In the Out-patient Department we saw one or two cases of chronic orchitis and painful enlargement of the epididymis, following gonorrhœa; the patients were directed to keep the scrotum enveloped in a piece of lint covered with an ointment of the following composition :—Half a drachm each of strong mercurical ointment and iodide of potassium ointment. Sir Henry advised them to further dilute the preparation with lard, if they should suffer inconvenience from its use. Special injunctions were also given that the part should be well suspended by means of a handkerchief attached before and behind to a girdle of some kind.—*Lancet*, Aug. 31, 1872.

On the Use of Plaster Splints in Remedying Displacements in Fractures Irreducible by other Means.—All surgeons know how difficult it is sometimes to remedy certain cases of oblique fracture of the lower third of the leg, in which the upper fragment projects under the surface. Various apparatus have accordingly been devised for the purpose of preventing this displacement. In France, Malgaigne in such cases used to employ his metallic point, which was fixed into the upper fragment so as to exert a certain degree of pressure, and prevent any fresh displacement. The fixing of the metallic point was attended with some inconvenience; besides, it is a special

instrument and not easily procurable. We were therefore struck with the advantages afforded by an ingenious contrivance which we saw Dr. Labbe employ with success a short time ago in his wards at the Hospital la Pitie.

The patient was a woman aged forty. Whilst in a state of intoxication she had been run over by a gig, and was at once conveyed to the hospital. Fracture of the lower third of the leg was found to have occurred, with very marked displacement of the upper fragment, which projected under the skin and threatened to tear through. A splint was immediately applied by one of the house-surgeons.

As the woman was labouring under delirium tremens, it was found necessary to use the strait-waistcoat, and strong doses of opium were administered. However, in consequence of the restlessness of the patient, the upper fragment of the tibia projected more and more under the skin, so that it became necessary to use some means to prevent its issue through the surface. Accordingly the apparatus was modified, and a cushion placed under the heel, but to no effect, and there was imminent danger of the fragment lacerating the skin. It was at this time that Dr. Labbe first saw the case, and with the view of definitely remedying the displacement and preventing deformity, he applied a plaster splint in the following manner: Reduction was first performed with the greatest care. As soon as this was completely effected the plaster splint was applied so as to cover the sole of the foot, the heel, and the whole of the posterior surface of the leg. The assistants were then requested to continue extension, counter-extension, and perfect apposition of the fragments, until the plaster had become hard. At the end of half an hour the apparatus was sufficiently solid. From that moment all anxiety about a breach of surface ceased, and, notwithstanding the disorderly movements of the patient, which continued two days longer, consolidation took place so perfectly that it was quite impossible to make out the seat of the fracture.—*Lancet*, Aug. 3, 1872.

DIPHTHERITIC ALBUMINURIA.—R. Browning, L. R. C. P. L. in the *British Medical Journal* says: From what I have lately witnessed while watching two local epidemics of diphtheria, I am disposed to consider that albuminuria is present in nearly all cases. That its appearance is usually about the end of the first week after

the diphtheritic membrane is developed, though sometimes earlier more rarely later. Coexistently with its appearance, there is a notable diminution of the quantity of urine, and an increased excretion of urea; whilst lithates generally, tube casts, both granular and waxy frequently, blood corpuscles not seldom, and pus globules occasionally are found on examination of what is secreted. The urinary specific gravity mostly averages 1016, and the temperature of the body is, as a rule, 100,4 to 102 degrees.

The gravity of the prognosis increases in an equal ratio with the quantity of albumen existing in the urine, independently of the amount of throat affection or kidney disorganization, and an early or late discovery of albumen is of serious import. The local mischief attacking the pharynx or other structures, and paralysis subsequently occurring are entirely the result and symptomatic of a morbid poison affecting the general system, just as the sore throat of syphilis is the sequence of a blood disease previously contracted. Albuminuria, in any quantity, is due to obstruction of circulation through the kidneys, caused by congestion of the malpighian tufts, this congestion being produced by paralysis of the nerves supplied to them; but a mere trace only of albumen arises either from pus or else blood which has casually entered the volume of urine. The indication of treatment is to remove this obstruction by overcoming the paralysis, and this is best accomplished by local Faradization. Seven cases are reported in detail, two of which terminated fatally. In these two no Faradization was employed. The other five which were all of a very serious nature, recovered after Faradization was resorted to. All were marked by unmistakable evidence of blood poisoning and albuminuria, with more or less suppression of urine. The treatment of all was conducted on the same principles, plus or minus the induction coil; the object aimed at being at first, during the premonitory symptoms, to regulate the secretions, and then to support the strength of the system in every possible way. My sheet anchor was the tincture of perchloride of iron, sometimes combined with glycerine, sometimes with chlorate of potash, and sometimes given *per se*. Stimulants and nourishment in every variety were supplied with no sparing hand. The customary topical medication was of course attended to. In some instances, the ordinary conductors fitted to most galvanized batteries; in others "Etna's" were employed. Faradism was thus employed over the lumbar regions along the lower part of the spine, and as nearly as possible in the direction of the ureters.

BRITISH MEDICAL ASSOCIATION.

ADDRESS ON SURGERY, BY MR. OLIVER PEMBERTON.

Surgeon to the General Hospital, and Professor of Surgery in Queen's College, Birmingham.

The first part of it he devoted to some points connected with the treatment of aneurism. He said :

Professor Lister's improvement in the Hunterian operation, by which the permanent closure of the artery at the spot tied can be insured, without dividing the coats of the vessel, at once effects a complete change in some of the most important conclusions that for long years have guided us in our treatment of aneurism. One of the greatest dangers attending the Hunterian operation has hitherto been considered to be the application of the ligature immediately beyond any considerable branch of an artery. This impression has deterred from applying a ligature to that portion of the artery which otherwise would have seemed to them best adapted for the purpose. That an abiding coagulum will form under certain circumstances in the vicinity of almost any number of branches on the proximal side of a ligature, I am perfectly satisfied ; but the attainment of this success in many cases depends on a fact which it is almost impossible for the surgeon to estimate beforehand ; that is, the facility with which the blood will coagulate or deposit its fibrin in any particular instance. * * * * *

Apart from this question of coagulation, I feel warranted in expressing my conviction that too much stress has been laid on the disturbing influence of a large branch or branches taking origin close to the part of the vessel tied. If, however, we are to believe the teaching of Professor Lister (" Observations on Ligature of Arteries." Edinburgh: 1869), it will be of little moment in future whether a plug form on either the proximal or distal side of the ligature at all, so long as the " prepared catgut " insures permanent closure of the vessel at the spot tied, without severance of the coats, and, consequently, without liability to secondary hemorrhage.

I am glad, before such a meeting, to be able to express my unbounded admiration of, and confidence in the use of the animal ligature, as placed before us by Professor Lister. If the so-called

“antiseptic system” has effected no more for surgery than to give us the means of effectually closing an artery without cutting it through, and without suppuration, it has in this placed the crowning glory on the treatment of aneurism, for which it has waited since the time of Hunter.

I shall now endeavor to show that the principles of treatment in the methods of flexion, compression of the sac, and manipulation, are one and the same.

The method of flexion can only be applicable to certain arteries. All that is needful to do is to keep the limb flexed, not continuously, but to such an extent as to alter the relations between the orifices of ingress and egress, and the fibrinous laminæ of the sac. Some of these laminæ become, as it were, dislocated, and protrude more or less into the stream when a fresh deposit of fibrin occurs, and so the cure is gradually effected.

The exercise of pressure upon the artery above the angle of the flexion appears to me useless. What we want is a stream of blood flowing into the aneurism, that it should be more or less retarded there, and that there should be a present something in the nature of a foreign body—for example, the fibrous laminæ, on which blood would coagulate and deposit its fibrin. This retardation of the blood in the sac can be effected by a gentle compression of the artery on the distal side of the aneurism, as I strongly hold that what we want in these cases is a deposition of fibrin rather than a coagulation of blood. For, surely, the slow deposition, layer after layer, of solid fibrin in the sac until the filling-in is complete, is a surer guarantee against subsequent mishaps than if it were closed by a mass of suddenly coagulated blood.

I entertain the opinion that the compression of the sac ought to be used more frequently than it is now. The principle of this proceeding is exactly the same as flexion; we want simply to alter the relations of the laminated fibrin to the cavity of the aneurism, so as to bring about a further deposition of fibrin on the projecting surfaces of any of the displaced laminæ. The pressure need not be continuous. It should be very gentle. It need not, even, be distributed uniformly. But it must ever be borne in mind that if it be carried to such an extent as to empty the sac, and to press one wall against the other, then a cure cannot occur. The very conditions under which a cure is possible are here ignored. Blood must

pass through the sac. It must not pass through too rapidly ; and I now think that this would be facilitated by gentle pressure being made on the artery below the aneurism.

Reduce the force and volume of the blood current by any carefully considered measures, and we follow out the reasoning of Brador and Wardrop, in the distal ligature ; a reasoning which is rendering amenable, to the treatment of internal aneurisms hitherto beyond surgery ; a reasoning that has the authority of nature's own proceedings to recommend it, from the fact that it is more or less identical with the mode in which the so-called spontaneous cures are brought about.

I cannot but regard the treatment of manipulation to be based on exactly similar principles to those on which the methods I have just alluded to are founded. No forcible pressure to detach fibrinous laminæ, in my judgment ought to be used ; as the result would be almost certain separation of small portions of the clots, which would be carried into the circulation, and would eventually plug the smaller vessels, causing symptoms according to the functions of the parts which the plugged vessels supply. For I must own I have not been able to see how these clots could be located at either outlet, to be fixed by arrangement, as it were, at a spot where it is simply impossible to be assured that they would effect a lodgment. All that is necessary is that the aneurism should be gently manipulated, so that the laminæ of fibrin in its interior should occupy a different position to that which they had previously held with reference to the two orifices of the sac ; and in order that the blood should not be allowed to pass out of the sac too freely. If I have an opportunity, I shall endeavour to compress the distal artery in accordance with the principles I have been advocating.

I have now to call your attention to what I believe to be a not uncommon result of the cure of aneurism, after it has been effected for some time ; I mean the formation of varicose aneurism, or aneurismal varix. I shall first relate two cases. In 1844, my late colleague, Mr. Amphett, tied the superficial femoral for an aneurism of the artery as it enters Hunter's canal. The patient was 41, and a soldier. There was nothing unusual at the operation, and the ligature was thrown off on the nineteenth day. Ten days subsequently, there was arterial hemorrhage from the seat of the ligature. This recurred in ten days, and a third time in fourteen. Pressure on

the arch was used, and the patient recovered. He remained well for upwards of three years, when a tumor formed at the seat of operation, which was evidently an arterio-venous aneurism. With this coming under the care of my colleague, Mr. Baker (our President), he died with a drunken pleurisy, just five years from the date of the operation. I was fortunate in being able to dissect his vessels. The femoral artery had formed an aneurism at the seat of the operation as large as a hen's egg, and the femoral vein communicated with the artery by a large opening. The former aneurism was cured, and the artery between it and the seat of the ligature was impervious.

LITHOTOMY.—Mr. Pemberton next considered the subject of Lithotomy. Advocating the median operation, he said :

I shall be prepared for it to be said of my advocacy of median lithotomy, "The statistics of your own cases are against you." My answer is, "Statistics are not everything. A case may end just as well one way as another, though the troubles on the journey differ widely, and no one will question that lateral lithotomy in children is eminently successful. But every operator who has sufficiently tried any given two methods of procedure, has a right to say which of the two he prefers ; and therefore it is that I say, when I reflect on the anxiety that I endured in watching the threatenings of mischief in children cut by the lateral operation, I rejoice that I have cause for it no longer, notwithstanding the general good fortune that attended my practice with that method.

And now as to the cases where the median operation should not be selected. In any instances where the finger is not likely to reach the bladder, so that instrumental dilatation would be required, the latter operation should be preferred. The reason I use my finger is because I have more control over it than over an instrument. I can regulate the one, not the other. I would sooner cut than lacerate at any time, and I consider that the use of instrumental dilatation in this operation means laceration. You may use it, on and off, with impunity, but it is a most destructive instrument—reviving all the dangers of the discarded Marian. I attribute the peritonitis, which carried off my single fatal case, solely to the laceration of the neck of the bladder that of necessity followed its use. I repeat, the only dilator must be the finger, and so long as the neck of the bladder can be widened by this sufficiently to allow of the removal of a

stone without laceration, I shall deem it a part of my duty to advocate the adoption of this form of median lithotomy.

I hope, however, my observations will not be misunderstood. I am second to none in admiring what Chelseden practiced, and what Liston and Fergusson have brought to perfection—the lateral operation for stone. I have been surrounded during the whole of my professional life by teachers and colleagues who have had unusual opportunities for practice, and who have realized brilliant successes in this very operation ; but, in my opinion, it is not the most desirable operation to perform for all stones, at any age and under any circumstances, as some would have us believe.

STRICTURE OF THE URETHRA.—Mr. P. then proceeded to speak about stricture of the urethra : It is to me remarkable, but it is true, that the views entertained by the highest surgical authorities of the day differ on no subject so widely as on the particular system they adopt and recommend in the treatment of stricture. Simple dilatation and rest, I am thankful to say, have had a great following, and, if I mistake not, will yet rise into higher position. The main quarrel is between the advocates of internal as opposed to external division. The late Professor Syme (*Stricture of the Urethra*, p. 21, 1855) thought he had effectually put an end to the use of those “dreadful engines,” as he termed M. Reybard’s instruments ; but he was mistaken, for strictures of this day are both cut, split, and torn ; and new engines for the purpose multiply, as if the great surgeon had never lived to speak of plunges in the dark with caustic, or of ripping open the urethra by internal section.

Stricture may fairly be defined to be a diminution of the normal diameter of any portion of the urethral canal ; and as it must be admitted that the existence of any stricture, however slight, from whatever cause proceeding, and of whatever nature, may sooner or later give rise to serious consequences in the condition of either the bladder or kidneys, it is needful for the surgeon to discover it and cure it as soon as possible. But the real question is in reference to this word cure. Have we to deal with a simple stricture that has resulted from inflammation of the lining membrane of the urethral canal, or with a stricture originally of this kind, which has been aggravated and increased in extent by ill-considered surgical proceedings ?

For the first there is a cure by simple dilatation. For the second there properly is no cure. Once organic stricture, always organic stricture, is my belief. Whenever the lining membrane of the urethra has been injured, whether by accident, disease, or by bad surgery, the spot will contract and establish permanent stricture, and I do not believe that the materials constituting such cicatricial narrowing are ever absorbed.

If you endeavor to restore the normal calibre of the urethra under these conditions by ever so well considered a system of dilatation, my opinion is that the contraction will return sooner or later with increased vigor, the natural elasticity of the canal being gone ; in other words, dilatation will not effect a cure, and never does effect a cure.

But dilatation, if it be well and properly carried out, will protect the patient against the occurrence of those diseases which, dependent on individual health and mode of life, arise either rapidly or slowly in all cases of stricture. The degree to which it is necessary to carry this may fairly allow of discussion ; for I have ever before my mind the conviction that the very means made use of to effect the so-called cure, may become the certain cause of the continuance, and, in many cases, of the increase of the malady.

I think it will be admitted that the tendency to narrowing in cases of stricture differs very markedly in individuals. Some may show few signs of change during many years, others, especially those arising from the effects of laceration by direct violence, certainly, surely, and often rapidly increase. In all cases, treatment by dilatation is necessary ; but I doubt myself whether it is needful always to endeavor to restore the standard of the canal to the utmost of its original extent. I believe that there are many cases which admit of being maintained at a standard short of this, depending, however, on the facility with which the contraction yields, and its rate of increase subsequently. And it must never be forgotten that when once this treatment by dilatation has been commenced—no matter how carefully or how thoroughly it may have been done—it will have to be continued, whether at the hands of the surgeon or of the patient more or less during life.

For my own part, time being given, I do not believe that there is any stricture through which an instrument cannot be passed by a skilful surgeon. This being so, treatment by gradual dilatation

follows ; and, in my judgment, this should be by the silver catheter, as the safest, simplest, and most certain instrument in the greatest number of hands yet given to us, *bougie a baule bougie alivaire* notwithstanding. If the induration be cartilaginous non-dilatable, or if there be fistula, the treatment by external division on a grooved staff should be adopted as speedily as possible.

Entertaining this view of the permanence of the changes established in the urethra by injury or disease, I am not very likely to favor any internal severance of the lining of the canal, whether by Mr. Holt's method of so-called "splitting," or by any form of internal cutting. I believe a wound is produced just as much in the one case as the other. I regard those methods as artificially inducing the very conditions which I lament should result from almost unavoidable causes ; and I further believe that a shut-up wound on the internal face of the lining of the urethra, is attended by dangers, from which an open wound on the outside face is comparatively free (a). I have had occasion to divide the urethra after Professor Syme's method in upwards of thirty cases. In one case only was there a fatal ending, and this from pyæmia. In no case was there a relapse, provided that an instrument was passed from time to time, the frequency of this being determined by individual tendency to re-contraction, once a month to once in three months, being about the average ; and by this means the calibre of the urethra was without difficulty maintained at its original standard. All the cases that I have seen, save one, have required this continued resort to dilatation, and will require it, in my judgment, more or less during life. For there is no more a cure by this than by dilatation or splitting. In the case that did not require it a fistula remained permanently in the perinæum, letting through a little urine, the general stream flowing by the urethra, which at the end of twelve years shows no disposition to contract.

If the induration of the urethra, and narrowing, be of such an extent as to preclude the idea of dealing with it by external division, I prefer to tap the bladder by the rectum. I do not feel inclined, at present, to divide from the bulb to the meatus ; and this literally must be the length of an incision in many of these long-standing cases, if the entire disease is to be dealt with.

(a) I will, with Sir H. Thompson, admit its use in narrowings at the external meatus.—*Pathology and Treatment of Stricture, third edition.*

There are numbers of these inveterate cases wholly unsuited to external division; but they are eminently calculated to be dealt with by a method which deviates the course of the urine to another channel, in order that rest may heal the fistula, and absorb much of that adventitious material blocking up the natural urethra, which can then readily be found, and have a standard established almost without resort to dilatation.

I frankly say that I do not believe that either internal or external division of any urethra will cause the healing of fistulæ in the groin, buttock, and perinæum, where a man passes his urine, as it has been graphically described, like a watering pot.

Surely, relief by the rectum will stand comparison with all the manœuvres that have been suggested from the days of Hunter to Grainger, and from Grainger, who, by the by, belonged to us here, to Gouley and Wheelhouse. I cannot conceive why a patient is to sustain—sometimes for hours together—the distress belonging to hopeless attempts made to trace, in that stage of the disease, an impracticable canal, when the chief cause of the malady—the flow of the urine—can be reached and diverted in a moment. Since Mr. Cook published his views *Medico-Chirurgical Transactions*, Vol. XXXV., p. 153), now just twenty years ago, I have had many opportunities of seeing the results of this proceeding.

I am able confidently to state that it is wholly free from danger. Indeed, I can scarcely conceive death following as a direct result of the operation. So little fear of the proceeding had one of my patients that he has been tapped at least six times for the relief of fleeting attacks of retention, dependent on a rapidly distended bladder, unable to empty itself in the presence of long-standing organic stricture. I have seen him almost within a day or two afterwards as if nothing had occurred. Further no fistula remains, for the opening in the rectum invariably closes after a few weeks.

I have left in the silver canula for three weeks, and have not found any inconvenience from its presence; indeed, it appears to me that one of the greatest arguments in favor of its adoption exists in the fact of the position of the canula, which, whilst certainly securing the emptying of the bladder, is wholly removed from the urethra. I am strongly myself of opinion that many urinary cases terminate fatally from urethral irritation, set going and kept up by an instrument retained in the canal in its length.

Some persons are very tolerant of tied-in catheters, whilst others, dependent on a certain idiosyncrasy, cannot sustain with impunity the simple introduction of an instrument. I saw a case in a young man which all but ended fatally from epileptic convulsions, induced by a first catheter; whilst the single introduction of a lithotrite in a man of 77 to measure a large smooth stone that had been carried with impunity for years, set up such an attack of cystitis that death ensued. I was very much impressed by a case in which a man, suffering from complete paralysis from the bladder downwards, owing to concussion of the spine, had a silver catheter tied to his bladder. He appeared sinking fast, and the most profound irritation of the bladder was established. I directed the urine to be drawn off every eight hours, and he began from that moment to amend, and ultimately recovered. Here, doubtless, the true explanation lay not in idiosyncrasy, but in the fact of the existence of disease from the injury. You may leave an instrument in the bladder for years from the perinæum, but you cannot do this with impunity and traverse the length of the urethra. Morbid sympathies become excited in connection with the urethra, which was not produced by the introduction of instruments into other mucous channels.

In what I have said, I have urged the adoption of tapping by the rectum, as affording assured relief to the most inveterate forms of stricture. And in considering the treatment of this disease, I have hitherto limited my observations to cases of stricture of the urethra *per se*, not to those complicated by retention of urine. I must equally urge it, however, as the remedy most reasonable for almost every form of retention. It is the absolute cure of spasmodic stricture; and if, in any case arising from this cause, after one good effort has been made to obtain relief by ordinary means, there is no success, it should be carried into effect. If retention be present with an impermeable urethra from organic stricture, a double necessity supports its selection, whilst I have yet to learn that it is inadmissible in the retention of old people from enlarged prostate. I know that it can be accomplished in these cases, but of course not so readily as if the rectum had only its ordinary contents; and I am quite satisfied that far less irritation would be produced in the majority of these diseases, where death so often directly results from the effects of instrumental measures, by the presence, at the most depending part of the bladder, of a harmless tube, calculated to secure the removal of all urine

secreted, and thus master that inevitable decomposition which is not overcome by any other method in use, for the simple reason that one and all fail to empty the bladder. If the membranous urethra bulge behind a stricture, or if an abscess opened in the perinæum suggest a ready path to the bladder, by all means let a female catheter effect, through the perinæum, what otherwise, I maintain, can be accomplished by the rectum.

Some years ago I asked the question, "Can the urethral canal be permanently restored whenever any complete and considerable portion of its length has been entirely destroyed?" I believe the answer must yet be "No." I had then a boy of sixteen, with at least two inches completely destroyed by burning; and, believing this, I established him with a silver perinæal tube, through which he now (aged 27) passes his urine without trouble; but there is nothing in the growth of the parts that tempts me to interfere, for I know the whole circle of the canal must be gone.

I think, however, that if only a streak of mucous membrane lingers about the part, an efficient connection can be re-established even after the lapse of many years.—*The Doctor.*

HABITUAL DRUNKARDS.—The *British Medical Journal* of June 29, contains the report of the select committee of the English House of Commons appointed to inquire into the best plan for the control and management of habitual drunkards, from which we make the following extracts:—

"In view of the absolute inadequacy of existing laws to check drunkenness, whether casual or constant, and in view of the fact that drunkenness is the prolific parent of crime, disease, and poverty, the committee recommend "that sanatoria, or reformatories for those who, notwithstanding the plainest considerations of health, interest, and duty, are given over to habits of intemperance so as to render them unable to control themselves, and incapable of managing their own affairs, or such as to render them in any way dangerous to themselves or others, should be provided. These should be divided into classes A and B; A, for those who are able, out of their own resources or out of those of their relations, to pay for the cost of their residence therein. These, whether promoted by private enterprise or by associ-

ations, can be profitably and successfully conducted. B, for those who are unable to contribute, or only partially. These must be established by state or local authorities, and at first at their cost; though there is good reason to believe that they can be made wholly or partially self-supporting.

"The admission to these institutions should be either voluntary or by committal. In either case, the persons entering should not be allowed to leave, except under conditions to be laid down; and the power to prevent their leaving should be by law conferred on the manager.

"The patients should be admitted either by their own act, or on application of their friends or relatives, under proper legal restrictions; or by the decision of a legal court of inquiry, whenever proof shall be given that the party cited is unable to control himself, and incapable of managing his affairs, or that his habits are such as to render him dangerous to himself or others."

The committee further recommend that the fine for drunkenness, for the first or second offence (when it is most desirable to prevent the formation of the habit) should not exceed forty shillings, or, in default thereof, imprisonment for a period not exceeding thirty days. "It is in evidence," the committee say, "as well as from those who have conducted and are still conducting reformatories for inebriates in Great Britain, as well as by those who are managers of institutions in America, that 'sanatoria,' or inebriate reformatories, are producing considerable good in affecting amendment and cures in those who have been treated in them." The average number of cures is stated to be from thirty-three to forty per cent. of the admissions,—this percentage being based upon subsequent inquiry, from which the cures appear to be as complete and permanent as in any other form of disease, mental or physical. The average time occupied in effecting these cures is stated at from twelve to sixteen weeks in America. For the English institutions the period has been longer. That the proportion of cures is not larger is attributed by all the witnesses to a lack of power to induce or compel the patient to submit to treatment for a longer period; and that power is asked for by every one who has had, or still has, charge of these institutions.—*Med. Times.*

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HYPODERMIC MEDICATION.

We are indebted to Dr. Alexander Wood, of Edinburgh, for the discovery and application of Hypodermic Medication. It was first used by him in 1843, in the treatment of a case of neuralgia, and for many years its use was confined to the treatment of this affection and morphine was the only agent so used. Wood believed that the remedy to be effectual should be localized, although he was well aware of its general effects on the system. Charles Hunter, of London, wrote an essay in 1859 on "the Hypodermic treatment of disease," in which he showed that localization of the injection was not necessary. He was an enthusiastic advocate of this plan of medication. From this time its use became very general throughout England and on the continent.

It was first used in America by the late Geo. T. Elliott of Bellevue Hospital, in a case of Sciatica. Since then it has been gradually growing in favor among the profession, and is now very extensively used. But notwithstanding this rapid advance and its many advantages over ordinary medication, there are still many practitioners who have never tried it and who do not think it possesses any advantages over the old way of giving medicine; some are prejudiced against it, and others regard it as an innovation or a novelty which is destined soon to be numbered among the things that were. It has, however,

in spite of all opposition assumed a wide range of application, both in the variety of diseased conditions to which it is applicable and the remedies used, and has taken its place as a standard means of great value to both the patient and practitioner in the relief of many painful and spasmodic diseases.

Remedies injected into the sub-cutaneous areolar tissue, have in most instances the same effect as when administered by the mouth. Some years ago a scientific committee was appointed by the chemical society of London, to report on the physiological and therapeutical effect of remedies administered subcutaneously, and they gave it as their opinion that no difference was observed in the effects of a remedy thus given, and by the stomach, except greater rapidity, certainty, and intensity of effect, and requiring a less amount to affect the system than when given in the ordinary way.

The agents thus used, being generally powerful in their nature, its application is not always unattended with danger, and therefore it is necessary to exercise care in its administration. Very great improvement has been made in the *instruments* now in use, and therefore nothing need be said regarding them further than that those with a graduated glass barrel are preferable, as it enables one to see the quantity used, and also to be sure that no air occupies the barrel. One of the greatest dangers of this method, except its use in Cardiac disease, is the risk of injecting air or the solution into a vein. This may always be avoided by pushing the needle through the integument, (which has been pinched up for that purpose on the breast, arm, or shoulder) to the extent of $\frac{3}{4}$ of an inch, and then withdrawing the point a short distance before injecting the solution. If air is drawn into the syringe in filling it, the instrument should be inverted, and the piston pushed in, till all the air is forced out.

Much of the success of this method of medication depends upon the purity of the medicines used, and the character of the solutions. The remedy should be in a perfect state of solution, and always filtered to remove any undissolved portions, as they are apt to give rise to the formation of small abscesses. The solution should not be too strongly acid or alkaline, and not too much concentrated. Pure distilled water only should be used, as a solvent, when practicable, and the solution should not be kept too long. We give below some of the formulæ in common use.

For Morphine, Magendie's solution is the best. It consists of

Morphiæ sulph. grs. xvj ; Aquæ dest. ʒj. Mix and filter. The dose is from 5 to 8 minims.

For Atropine ; R. Atropiæ sulph. gr. ss. ; Aquæ dest. ʒiij. Mix and filter. The average dose is 4 minims. If it is desired to combine these two remedies, one grain of atropine may be added to Magendie's solution ; of this five minims is the average dose.

For Strychnine ; R. Strychniæ sulph. gr. ; Aquæ dest. ʒiij ; Acidi hydrochlor, gt. j. Mix and filter. Average dose five minims. It would be well to begin with a small dose and gradually increase.

For Quinine ; R. Quiniæ sulph. grs. xx ; Acidi sulph. aromat, minims ten minims ; Aquæ dest. ʒiij. Mix and filter. Nine minims equal one grain. This solution is more apt to cause abscess than the above, on account of its greater acidity.

For Calabar Bean ; R. Ext. calabar bean grs. ij. ; Aquæ dest. ʒj. Mix and filter. The average dose of this is 8 minims.

For Corrosive sublimate ; R. Hydrarg Bichlor gr. j. ; Aquæ dest., ʒij. Mix. Dose about 10 minims, and may be used every alternate day. It has been highly spoken of in the treatment of constitutional syphilis.

THE APPLICATION OF ELECTRICITY.

In continuation of this subject, referred to in our last number, we will offer some remarks on the application of Electricity. In Medical Electricity there are two principal methods of applying the current, termed respectively, General and Localized Electrization, with either the galvanic or faradic currents.

The object of general electrization is to bring the whole of the tissues and organs of the body under the influence of the electric current. This is usually done by placing the patient upon a metallic place to which the negative pole is attached, while the positive pole is applied to the surface of the body. For this purpose the faradic or secondary current is the one usually employed ; but the galvanic may sometimes be used with advantage, especially where the patient is not very susceptible to ordinary stimulation. For the application of the faradic current to the general surface, the operator's hand is preferable to the ordinary sponge electrode, especially when operating about sensitive parts, as the head and neck ; no

artificial electrode equals the human hand in flexibility and adaptation to the inequalities of the surface of the body, and excessively sensitive persons will bear this mode of application who could not tolerate it in any other way. Electricity is not a mere stimulant, the effects of which soon pass away, but it possesses tonic properties of the highest value in the treatment of various disorders.

In the treatment of various nervous and functional diseases in which excessive debility is the principal symptom, the tonic influence of general electrization is most decidedly manifest. It is exceedingly useful in all cases of exhaustion uncomplicated with organic disease.

Localized electrization has reference to the application of a current of electricity to special nerves, muscles and organs of the body, and a variety of electrodes of different shapes and sizes for localized electrization are adapted to the parts to which it is applied. The limits of the present article will not admit of our entering fully into the details of its application to all the various parts of the body to which it may be applied; but we will indicate a few. In applying it to the head one pole may be placed upon the forehead, and the other over the occiput; or a pole may be placed on either mastoid process or on either temple. Less dizziness is caused when the current passes from the forehead to the occiput than when it passes from side to side. Galvanization of the sympathetic may be readily effected in the cervical region by applying one of the electrodes over the 6th cervical vertebra, and the other in the auriculo-maxillary fossa. It is, however, impossible to exclusively localize the current in the great sympathetic; the spinal cord is also affected in the above method. The spine may be galvanized by applying one pole a little below the occiput, and the other at the coccyx, or by placing an electrode on either side of the spine, one above the other, about 2 inches apart. Cutaneous faradization is accomplished by thoroughly drying the skin and applying the current by means of dry metallic electrodes, or by the hand. This method has been found extremely useful in conditions of profound cutaneous anæsthesia. The electric moxa is produced by applying rapidly to one part a dry and finely pointed electrode. It is frequently employed as a counter-irritant in obstinate cases of neuralgia.

MEDICAL ELECTION.

Owing to the non-appointment of a returning officer the election of a representative for the Territorial Division of Midland and York, did not take place last month as announced. This defect has been remedied by the appointment of Dr. Adlington, of Toronto, to that office. Thursday, the 7th inst., is the day fixed for the election to take place. The voting papers have been issued and are returnable on the above date.

CANDIDATES.—Dr. N. Agnew of this city, brother of the late representative for this Division, is a candidate for council honors, and meets with much favor, especially among those who most warmly supported his brother in the last election. He is well qualified for the position, and, if elected, will make an able and faithful representative. His election would also be a fitting recognition of the past service, and a grateful tribute to the memory of the late representative.

Dr. Bull of Weston has also announced himself as a candidate. He is well known to many in the riding, and will, no doubt, secure a large number of votes.

Dr. Hillary of Aurora, is also in the field, although rather late in announcing himself. He has a good number of friends both in the country and city who will accord him their support and influence. Other names have been mentioned, but as they have not announced themselves as candidates, it is unnecessary to refer to them.

ATTEMPTED SWIM FROM DOVER TO CALAIS.—Mr. Johnson, the Champion Swimmer of England, (*British Med. Journal*), made an attempt, during the month of August last, to swim across the British Channel, from Dover to Calais, in ten hours. The distance is about 40 miles, and would require the constant immersion of the body in the water for about six hours, swimming at the rate of seven miles an hour. The great difficulty was in resisting the prolonged exposure to cold in moving water. He remained only a little over an hour in the water, and had swum about seven miles when he became completely exhausted. He was unable to raise a basin to his mouth, and his lower extremities were benumbed and perfectly cold.

The temperature of the water being about 60 degrees F., and the heat of the body about 99 degrees, a continuous extraction of thirty-nine or forty degrees of heat would go on, so that physiologically speaking the feat is impossible unless some very ingenious means of supplying artificial heat were adopted.

A WORD TO THE ECLECTICS.—In another column will be found a letter from Dr. Muir of Merrickville—one of the Eclectic representatives of the Medical Council of Ontario—addressed to the Eclectic body in reference to the question of fusion with the general profession. This matter has for some time been under discussion and is gaining strength every day. The most intelligent members of that body are decidedly in favor of a movement of that kind. They can see plainly enough that it is of no use to hold out and struggle against the inevitable. They have no distinctive features either in theory or practice, and the perpetuation of a sect under such circumstances must be considered by every reasonable thinking man as a useless piece of legislation, and the sooner the law is repealed the better.

FOREIGN DIPLOMAS.—Dr. J. W. M'Laughlin, gold medalist of the University of Toronto, has passed his examination before the Royal College of Surgeons and Royal College of Physicians, and obtained the two diplomas.

Dr. John Fraser, of Victoria College, has also passed the examination before the Royal College of Physicians, Lond., and the College of Surgeons, Edin.

Dr. Lucas, a graduate of McGill College, has also passed a highly creditable examination before the Royal College of Surgeons, Eng., and the Royal Colleges of Surgeons and Physicians, Edin.

CANADA MEDICAL ASSOCIATION.—The next meeting will be held in St. John's, N. B., on the first Wednesday in August, '73. The following gentlemen have been appointed to deliver addresses at the next meeting :—Dr. Howard on Medicine. Dr. Hingston on Surgery. Dr. Hodder on Obstetrics. Dr. Botsford on Hygiene.

TREATMENT OF CANCRUM ORIS.—Dr. McGreevy (*British Medical Journal*) says : Of all the local remedies or applications he resorted to in such cases, he has never found any application so useful or so effective as hydrochloric acid. Neither nitric acid, nitrate of silver, nor chlorate of potash, nor any other remedy that he ever

tried or used, except hydrochloric acid, did he ever find to be of the least use to check cancrum oris. He has almost never found hydrochloric acid fail to check the progress of this dreadful disease at once, and bring on a most rapid and healthy action in the part. Nor does it cause so much pain or suffering to the little patient as one would suppose, seeing that the gangrenous spot is almost entirely without feeling at this time. This acid is easily applied to the ulcer by means of a feather or small camel-hair brush. He has cured many cases of cancrum oris by this means.

MEDICAL COUNCIL EXAMINATIONS.—The following gentlemen have successfully passed the matriculation examination prescribed by the Council of the College of Physicians and Surgeons of Ontario: John Hunter, Alfred C. Bowerman, Thomas Hobbly, Hugh Park, Walter Geikie, Alfred Bray, Alexander Fraser, Byron Field, Henry Minshall, Henry McCrea, William Kennedy, J. E. Reeve, W. J. Wilson, Sabin Stevenson, R. A. Earl.

DEATHS AMONG THE PROFESSION.—Frederick C. Skey, C.B., F.R.S., Consulting Surgeon St. Bartholomew's Hospital, London, England, on the 15th August 1872, aged 72. Alfred Poland, Esq., Lecturer on Clinical Surgery at Guy's Hospital, on the 21st August, 1872. Dr. T. C. A. Louis, of Paris, on the 23rd of August, at the advanced age of 86. Dr. Curran, of the Carmichael School of Medicine, Dublin, on the 21st of August.

ARTIFICIAL LIMBS AND ORTHOPÆDIC APPARATUS.—Mr. Authors, of Toronto, has shown us a case of the above appliances which he had on exhibition at the Provincial Fair, Hamilton, and for which he received *two first prizes*. It contains artificial arms, legs spinal brace, hip joint appliances, club-foot apparatus, &c., &c., all of which are of superior make, excellent quality, and beautifully finished, and do credit to Canadian skill and enterprise. Mr. Authors has received numerous testimonials from Medical men and others in Canada as to his skill and intelligence as a manufacturer of artificial appliances of various kinds. His work gives the most entire satisfaction.

IODIDE OF POTASSIUM IN CYANOSIS FROM NITRATE OF SILVER.—Dr. Yandell, of Louisville, in the *Medical Practitioner* reports two cases of the above affection, in which the discoloration was removed by the prolonged use of Iodide of Potassium. Its beneficial effects were accidentally observed by him in the treatment of syp-

ilis. Both cases had been treated for epilepsy in youth, by Nitrate or Silver ; and, having subsequently contracted syphilis, were being treated by Iodide of Potassium, and in both the stains gradually disappeared. Both patients were also treated by the moist mercurial bath during much of the time, and therefore he suggests the use of the vapor bath in connection with the Iodide of Potassium.

DELAY AFTER DISCHARGE OF LIQUOR AMNII.—Dr. Matthews Duncan read a paper at the Lond. Obst. Society, June 5th, on the above subject. A patient expected her confinement in June, 1872. On the 10th of March she had a copious discharge of liquor amnii, and slight irregular pains ; but labor did not set in until the 25th of April, making an interval of 45 days, during which time occasional gushes took place till labor came on. The child was born alive, but survived a very short time.

PYROSIS.—S. Thompson (*American Practitioner*) speaks highly of the administration of the saccharated solution of lime-water and milk in the treatment of pyrosis or water brash. Antacids are always attended with beneficial results. He gives the Liq calcis saccharati in the proportion of one drachm to the ounce of milk.

ARTIFICIAL MILK.—The following is the formula for preparing artificial milk, which was in such urgent requisition during the Siege of Paris. It has been called "siege milk." 47 grms. of sugar, 30 grms. of white of egg or gelatine, one part of warm water and about 1 grm. of carbonate of soda mixed with 60 grms. of pure oil, or fat obtained by frying. This when agitated forms a pasty fluid, and when mixed with an equal quantity of water forms a fluid resembling milk in appearance and chemical properties.

CHLOROFORM ADMINISTERED DURING SLEEP.—Dr. Whitmarsh in the *London Lancet* reports a case in which chloroform was administered during sleep. The patient was a child of about six years of age, upon whom the operation of circumcision was about to be performed. Evening was the time chosen for the operation, and when the surgeon arrived the child was asleep. The chloroform was administered and the operation performed—the patient not waking for half an hour after.

DENGUE.—Dengue "fever" prevails to an alarming extent in Madras, India. Special prayers have been offered up in all the churches for its abatement. Cholera is also on the increase in various parts of the country. The troops are suffering severely.

CORRESPONDENCE.

To the Editor of the CANADA LANCET.

Dear Sir,—Permit me to ask whether it is in accordance, or consistent, with the ethics and dignity of the medical profession for parties to advertize and hang up in Post Offices, Waiting Rooms, and other places of public resort, such cards as the following, which I copied as it hung before me; verbatim dimensions 12x10, or more, and in large type, reading thus:

R. TRACY, M. D.,

Physician and Surgeon, Belleville.

Special Attention given to diseases of Women and Children.

Office hours, 9 to 5. Residence, etc.

Now, sir; it may be my ignorance of things *medical* in Canada, or I may haply be hyper-critical, or may-be the medical fraternity of Belleville have, and observe, no ethics at all; but in England—and I presume you consider the Canadian a branch of the British medical profession—we consider all such clap-trap modes of advertising as *infra dig.* and scout all those practising such as alike unworthy the respect of the faculty, or the public, meeting besides, as they deserve, the castigation of the medical press.

To say the least, sir, it is setting a very bad example, besides establishing a precedent. And on this matter I have the honour to remain,

Yours enquiringly,

AN ENGLISH MEDICAL PRACTITIONER.

[We have also received several notes and extracts calling our attention to other instances of quackery; one in reference to a man in the County of Grey, who is practising without any license whatever, and another in reference to an Eclectic practitioner, in the County of Simcoe, who styles himself the *great physician*, and who is in the habit of issuing placards and large posters, in which he says, among other things, he will warrant a perfect cure in falling of the womb, *cancer, rheumatism*, etc.

With the former we have nothing to do; the law should meet his case. The latter is a legalized practitioner who has disgraced the profession, and who should be held up to public scorn and indignation. We fear, however, that remonstrance would be of no avail in his case, and the game would not be worth the powder.

We would like to see a clause incorporated in our Medical Act which would meet such cases as the above, giving the Council power to cancel the licence of any practitioner who disgraces the profession by such disreputable tricks.]

BOOK NOTICES.

THE SCIENCE AND PRACTICE OF MEDICINE, by Wm. Aitken, M. D. Edin., Professor of Pathology in the Army Medical School. The 3rd American from the 6th London edition. 2 large volumes. Philadelphia: Lindsay & Blakiston; Toronto: Copp, Clark & Co. Price, \$12.00.

We are much gratified by seeing a new and revised edition of this exhaustive work on the Practice of Medicine. The American publishers deserve much credit for their enterprise in so speedily furnishing a most creditable reprint of so valuable a work with all the additions the author has made to it.

The work bears marks of careful revision; while much has been added, a great deal on many subjects has been re-written. By this means the author has been able to incorporate all the latest additions to Pathology and Medicine in his work, and to say this is no small praise. Much is added in this edition to those parts of the work which treat of "Pathology and Morbid Anatomy," Throat and Laryngeal Diseases; the value of Temperature in Fever and other affections; the use of the Sphygmograph in Cardiac and other diseases; disorders of the Intellect and many other important subjects which we cannot notice here from want of space, are treated in a very full and able way.

Altogether the work is one of great value, without which no modern medical library can be considered at all complete.

ON THE GENERAL AND DIFFERENTIAL DIAGNOSIS OF OVARIAN TUMORS, with special reference to the operation of Ovariectomy, with 39 illustrations, by Washington L. Atlee, M. D. Philadelphia: J. B. Lippincott & Co.; Toronto: Adam, Stevenson & Co.

OVARIAN TUMORS, their Pathological Diagnosis and Treatment, especially by Ovariectomy, with 56 illustrations, by G. R. Peaslee, M. D., L. L. D., Professor of Gynecology, Dartmouth College, &c., &c. New York: D. Appleton & Co.; Toronto: Willing & Williamson.

The former is a work of about 480 pages and the latter contains about 550. They are both eminently practical in their nature, carefully written, and well got up, and do credit alike to authors and publishers. In reference to the treatment of the pedicle Dr. Peaslee favors the use of the ligature in preference to the clamp. He uses a

flat silver tube, about 4 inches long, (like the scabbard of a sword), the open end of which projects through the abdominal incision, the other being in contact with the pedicle. This tube is also pierced by transverse holes about $\frac{1}{2}$ an inch apart. He transfixes the pedicle, at the same time passing the double ligature through one of the transverse openings in the tube, and then ties each half separately and brings one end of each ligature to the surface. A knife blade of peculiar form fits the tube and is used to divide the ligature whenever desirable. He does not consider it necessary to leave the ligature for more than 48 to 96 hours. The abdominal incision is closed by wire sutures about $\frac{1}{2}$ an inch apart. Dr. Atlee's work is devoted more to the general and differential diagnosis of ovarian tumors. The two books together will form a most useful work of reference on this interesting subject.

LEWIN ON THE TREATMENT OF SYPHILIS BY SUBCUTANEOUS SUB-LIMATE INJECTIONS. With a Lithographic Plate, illustrating the mode and proper place of administering the Injections, and of the Syringe used for the purpose. Translated from the German. Price, \$2.25. Philadelphia: Lindsay & Blakiston; Toronto: Copp, Clark & Co.

CLYMER'S EPIDEMIC CEREBRO-SPINAL MENINGITIS. With a Map of the City of New York, showing the Localities of the Disease in that City, etc. Price, \$1.00. Philadelphia: Lindsay & Blakiston; Toronto: Copp, Clark & Co.

BLACK ON THE FUNCTIONAL DISEASES OF THE RENAL, URINARY, AND REPRODUCTIVE ORGANS, with a General View of Urinary Pathology. 8vo. Price, \$2.50. Philadelphia: Lindsay & Blakiston; Toronto: Copp, Clark & Co.

THE NATURE AND TREATMENT OF SYPHILIS AND GONORRHOEA, by Charles Robert Drysdale, M. D., M. R. C. P., M. R. C. S., Eng., &c., &c. London: Balliere, Tindall & Co.; Toronto: Adam, Stevenson & Co. Price, \$1.12 $\frac{1}{2}$.

TRANSACTIONS OF THE AMERICAN MEDICAL ASSOCIATION, Vol. 23, 1872. Toronto: Copp, Clark & Co.

ON RESPIRATORY MURMURS, a Pamphlet, by J. R. Leeming, of New York.

APPOINTMENTS.

Thomas Willmot, Esq., M. D., of Port Hastings, N. S., Coroner for the County of Inverness. James W. Smith, Esq., M. D., of Ashburn, Coroner for the County of Ontario. W. B. Towler, Esq.,

M. D., of the Village of Wingham, Associate Coroner for the County of Huron. George M. Alyesworth, Esq., M. D., of the Village of Gorrie, Associate Coroner for the Co. Huron. B. L. Bradley, Esq., M. D., of the Town of Woodstock, Associate Coroner for the County of Oxford. A. C. Sinclair, Esq., M. D., of the Village of Port Elgin, Associate Coroner for the Co. Bruce. S. Bridgland, Esq., M. D., of the Village of Bracebridge, Associate Coroner for the United Counties of Simcoe and Victoria.

Dr. Powell, of Victoria, B. C., has been appointed Medical Superintendent of Indian Affairs in that Province.

Dr. F. H. Wright, son of Dr. H. H. Wright, of this City, has been appointed Resident Physician of Victoria Park Hospital, London, England.

OBITUARY.

Died at Allahabad, India, on the 13th of Sept., Staff Assistant Surgeon, Dr. John Dickson, son of Dr. Dickson, Medical Superintendent of Rockwood Asylum.

Dr. Dickson graduated at Queen's College, Kingston, four years ago; he went to England and was admitted a member of the Royal College of Surgeons, Lond., and Licentiate of the R. C. P.; Edin. He was then about one year and a half House Surgeon of the Royal Free Hospital, London. About 18 months ago he successfully passed the competitive examination for the Army Medical Service and was only about a year in India when he died.

He was convalescing from Dengue Fever (a new disease there,) which weakened him and rendered him more susceptible of Cholera of which he became a victim.

General regret is felt at his untimely end, as he was a favourite with all who knew him, skilled in his profession, amiable in his manner and a perfect gentleman; he is really a loss to the service, and the department to which he belonged.

Law Respecting Periodicals, Newspapers, &c.

1. Subscribers who do not give express notice to the contrary, are considered as wishing to continue their subscriptions.

2. If subscribers order the discontinuance of their periodicals or newspapers, the publisher or publishers may continue to send them until all arrears are paid up; and subscribers are held responsible for all numbers sent.

3. If subscribers neglect or refuse to take the periodicals or newspapers from the office to which they are directed, they are held responsible till they have settled their bills. Sending numbers back, or leaving them in the office, is not such notice of discontinuance as the law requires.

4. If subscribers remove to other places without informing the publisher, and their periodicals or newspapers are sent to the former directions, they are held responsible.

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Original Communications.

PIROGOFF'S OPERATION—PERFORMED ON BOTH EXTREMITIES OF THE SAME PATIENT, CONSEQUENT UPON INJURIES THE RESULT OF A RAILWAY ACCIDENT.

BY J. LIZARS LIZARS, SURGEON, TORONTO.

Louis Thibeault, French Canadian, æt. 28, having got off the train at Whitby whilst it was on the siding to allow an express-train to pass, and the train having backed up so as to get again on the main line on which it was coming past the station, at about five miles an hour, made a run and leaped upon the steps of the car, after trying to grasp the railing, the result being that he was thrown backward and both feet landed on the rail in such a manner that the wheels of the car passed over both insteps, the left one first, crushing both feet, but the left one most severely. The man was carried at once to an hotel opposite the station, and a medical man and clergymen sent for.

Having received a telegram to the effect that my services were required, I proceeded by the first train and arrived at Whitby about 2 P.M., where I had the pleasure of meeting Dr. Eastwood and the

Rev. Father Shea. As the patient spoke but little English, and his brothers, who were travelling with him, none at all—as Dr. Eastwood did not desire the charge of the case, and as on examination and consultation it was deemed better to have him removed to Toronto, I telegraphed to the superintendent of the Grand Trunk at Toronto to have a room ready for the patient and one of his brothers at the City Hotel, where I was aware the proprietors spoke French—an inestimable boon to the patient and his attendant.

Having bandaged both feet as securely as possible, I had him conveyed on a stretcher to the station and placed comfortably in the baggage-car (part of which had been cleared for his reception whilst the train was coming from Port Hope, no time being lost), and giving him a full dose of opium he slept soundly until we arrived at Toronto. A party of men being in readiness at the Union Station, he was at once carried to the hotel and put in bed between 1 and 2 A.M., 24th October, 1872.

At 2 P.M., my friend Dr. De La Hooke, having most carefully administered chloroform, with the able assistance of Dr. Spragge, I performed Pirogoff's operation on the left foot, the soft parts and bones being crushed to such an extent that no lesser mutilation could possibly be undertaken, and we preferred it to either Syme's operation or amputation at the lower third of the leg. The anterior tibial and external plantar having been secured and the various tendons and nerve trunks drawn out and cut off short, the tendo-Achillis divided with a tenotomy knife, the parts were adjusted and united by the ordinary silk suture, a piece of lint wet in the bloody water and a bandage applied. The patient was restored to bed and the influence of opium. On the 25th, and for some days subsequently, the wound on the left stump progressed very favorably, healing over two-thirds of its extent by the first intention, and each alternate suture was removed on the fifth day. During this period, there had been a little fever and some restlessness at night, but of so little consequence that an aperient was all the medicine he required. On the 31st, he felt very well, but from this up to the 3rd of November he began to show symptoms of constitutional irritation; the appetite failed slightly, stomach and bowels lost tone and the wound ceased to advance as rapidly and healthily as before—a state of things evidently due to the condition of the right foot, which, although purposely overlooked in this report, received our constant attention.

Let us now return to the 24th October—see and trace the condition of the right foot. As before stated, the left foot being the first to be passed over by the wheels, seems to have saved the right one to a small extent; for on the latter we found the great and second and third toes uninjured and under the control of the will, warm and possessing fair color and temperature, whilst the fourth and fifth were crushed and dead, the soft parts over the cuboid bruised, and a cut about one inch long existed in a line upwards from the head of the second metatarsal. A long, deep longitudinal wound existed on the sole of the foot, extending from the fourth toe to the middle of the arch of the foot. Through this, the finger could detect that all the metatarsals were broken, as also some of the tarsal bones. Such being the case and the patient being too low after the first operation to warrant our proceeding with the second, we determined to let him rally for a few days and then see if we could save more of the right than of the left foot. Whilst therefore the left one was going on most satisfactorily, the right one was in one sense doing the reverse. Gangrene had set in on the external parts of the foot, the line of demarcation formed extending from the third toe upwards as high as the junction of the cuboid and calcaneum, and downwards along the outer margin of the foot to the fifth toe, thence across the sole of the foot to the inner margin of the fourth, thence upwards to the point we started from. As the above state of affairs was evidently the cause of the declension in our patient's health, and as the time for further operative interference had arrived, having dressed the left foot and removed the remaining stitches and ordered Liston's lotion to be used, I told the patient to take some brandy and milk and to be prepared for operation at 2 P.M.

Again assisted by my friends Drs. De La Hooke and Spragge, I proceeded to operate, Dr. De La Hooke having once more placed the patient under chloroform. Having examined the foot more minutely than before, we were forced to abandon the idea of saving any of the toes, and in the first case resort to a modification of Chopart's operation—the flap of the tissues having to be taken from the inner aspect of the dorsum and sole of the foot. However, after making as large a flap as possible and separating the bones, we found, much to our regret, that we had not enough flap to cover the bones, and that we must resort as before to Pirogoff. The operation being completed with the utmost facility, the wound was sponged with

dilute chloralum and the parts brought carefully together with five stitches, lint wet with the chloralum and a bandage applied, and the patient removed to his bed. Pulse, 88 ; respiration free, slow and easy.

9 P.M.—Pulse, 80 ; skin cool, slight discharge of grumous fluid from wound, the peculiar color being due to the action of the chloralum on the blood ; has had milk, tea and toast.

4th.—Skin cool ; pulse, 76 ; tongue moist and slightly coated, slept well, evacuations natural. Both stumps look well and the patient very comfortable.

6th.—The left stump has again assumed its former healthy action. No unfavorable symptoms except a little formation of matter at the outer angle of both stumps. Injected lotion into the small cavities and applied pads over them, and the bandages as before. General health excellent.

9th.—Both stumps dressed and alternate stitches cut, but not removed ; some pus still bagging above left internal ankle.

11th.—As above. Removed the two ligatures and the remaining stitches from right stump. The amount of pus over left inner ankle diminished. General health excellent.

12th.—Discharge from left inner ankle less and from right inner angle commenced, as it did in the left, but extending more backwards towards division of tendo-Achillis. Most of the line of incision healed, but considerable thickening at outer angle. The pad and bandage on the left having materially assisted in diminishing the discharge from it and modelling the surface of the stump, I applied the same treatment to the right, having first injected the sac of the abscess with some of Liston's lotion. The patient having suffered from diarrhoea during the night, I ordered him some chalk mixture and chlorodyne, with rice diet.

13th.—Improving steadily ; quantity of discharge less and parts less sensitive. Bowels still slightly relaxed. Gave a couple of lead and opium pills.

14th.—Three weeks to-day since operation was performed on left foot ; cicatrization good over the central four-fifths of the wound. The corners alone open. As the calcaneum has not yet united to the tibia, to obtain their consolidation applied a bandage from above the centre of the calf of the leg down behind the os calcis, thence forwards and upwards along the front of the tibia as high as the point of departure—a portion of the ends being left free for use, as will be

described below. This first bandage being held firmly pressed against the os calcis, keeps this and the tibia close together. A narrow roller is now applied pretty firmly from the ankle upwards over the calf of the leg, both the perpendicular and circular bandages being painted with a solution of silica as we progress. The free end of perpendicular bandage being now turned down over the circular one, is glued to it by the silica, and a few turns of the circular one applied over it and painted, the whole forms in a few hours a firm casing for the entire leg, except the outer angles of the stump, which yet require dressing, which being done, as before, with lint and Liston's lotion, an ordinary small roller is applied over the uncovered parts by the figure of eight and the limb returned to its pillow.

15th.—Bowels still loose. Pills more frequently. Right foot dressed as before. Healing fast.

16th.—Doing well. Bandage not so hard as expected on left leg.

17th.—Re-dressed right and removed soiled lint from left. Its internal angle healed. The external corner alone not cicatrized, though it looks healthy.

19th.—Ordered casts to be taken of both stumps, and boots—like holsters—to be made of hard leather, to save him from cold and injury on his journey home, which is fixed for Thursday evening, the 21st inst. Right limb dressed same as left with silica bandage. Bowels quiet since 15th, and appetite and color improved.

21st.—The patient has progressed steadily since the last report, and is delighted at the idea of getting home. Mr. Casci has taken the casts of the stumps, and Mr. Authors the measurements for a pair of artificial feet. On the left side, the os calcis and tibia are united, and pressure to the extent of about thirty pounds can be borne on the stump without pain.

In the evening, we placed our patient in a Pullman car, and the Hon. Dr. Tupper, who happened to be on board, very kindly consented to keep an eye on him.

I have since received a note from my patient, dated Embrun, 4th December, in which he says he is doing well. I doubt not but that he will go on favorably until the bones are thoroughly consolidated and the soft parts reduced to a minimum, when he intends returning to Mr. Authors for a pair of artificial feet, which being made with a joint at the ankle as well as one at the ball of the toes, will restore to him the power of walking with freedom and ease.

I am induced to give this case to the profession through the columns of *The Lancet* sooner than I at first intended, so that my brother practitioners may give it their earliest consideration, as I am convinced that, when compared with Syme's operation or amputation through the leg, it will be found to be incomparably superior, as Syme's is much more difficult to perform and has the further disadvantage of the liability to the formation of a bag of matter in the cavity of the heel. It has been objected to Pirogoff (*Holmes' System of Surgery*, vol. ii., page 85), "that it tends to direct towards the ground the thin skin of the back of the heel instead of the thick cushion of the sole, while the increased length of the stump is rather objectionable than otherwise," to which I need only reply that in both of Thibault's stumps the thick cushion of the heel is opposed to the ground and in another case where I performed Pirogoff on a young woman at Seaforth over a year ago, the same result was obtained, as it always may be, by sawing the os calcis through rather obliquely from above downwards and forwards.

With regard to the second part of the objection, where both feet have to be removed, there need be no trouble, and if only one is amputated, the limb may be made quite short enough either by leaving less of the os calcis, or removing more of the tibia.

When the patient returns for his artificial feet, I will notify you of his condition.

PUERPERAL CONVULSIONS.

BY A. MCKINNON, M.D., CALEDON, ONT.

On the 3rd April last, I was called to see Mrs. McC—, whom I found in a convulsion. It speedily passed off, leaving her perfectly conscious, but easily agitated. The pulsations numbered about 92. Of her previous history, it may be briefly stated that she had been delivered, about eight hours before the convulsions occurred, of her third child. The labour was easy and very rapid. The placenta was expelled soon afterwards. The loss of blood was very slight. Her previous labours were also rapid and natural. The pelvis is of medium size and well formed. Her health during the period of gestation was good. She is thirty-four years of age.

After an interval of a few minutes, a second convulsion occurred. I found the first spasmodic movement always began on the right side of the body—very generally in the recti muscles of the right eye, but sometimes in the levator palpebræ, and less frequently in the lower extremity. A few seconds after these muscular movements, there was a suspension of respiration, followed speedily by violent spasms of the glottis, during which the head and neck become much congested. The duration of the violent spasm was variable—from half a minute to a minute and a half, or two minutes. As this spasm passed off, she became perfectly conscious, after each convulsion, during the first four or five hours. Afterwards, instead of returning to consciousness after each convulsion, she sank into a state of torpor or coma, from which any attempts to rouse her brought on another convulsion. In this comatose state, the lips and alæ nasi vibrated with each respiratory act; the mouth was wide open and the stertor was loud.

By way of treatment, the administration of chloral hydrate in fifteen grain doses every hour was first tried. For two or three hours, it seemed of some service, but afterwards, although the dose was given every half-hour, the convulsions recurred more frequently and more violently. Its use was discontinued. At 7 P.M., after six hours had passed in striving to relieve her by the chloral hydrate, I resorted to venesection to the extent of about twenty-four ounces. I gave chloroform by inhalation and an injection of valerian and asafoetida. The pulse had risen to 120.

11 P.M.—Dr. Riddall, of Alton, came to my assistance. As the convulsions still continued to recur, we decided upon a second bleeding to the extent of some ten or twelve ounces. and gave Hydrarg. submur. (3 ss.) The injection of valerian and asafoetida was repeated.

April 4—2 A.M.—The convulsions are less violent and do not occur so frequently, but the coma is more profound. Pulse, 130.

6 A.M.—Pulse, 135, feeble. The loud snoring respiration is now constant, except when a convulsion occurs.

9 A.M.—A large evacuation from the bowels. The catheter was used to relieve the bladder.

11 A.M.—The convulsions ceased to recur, but the loud stertor was constant. The heart's action was very feeble. Finding that she could still swallow, brandy and spts. ammon. aromatici were administered cautiously, but somewhat freely and frequently.

5 P.M.—She had rallied so as to be able to speak; pulse, 130. Beef-tea, milk and a small quantity of brandy were substituted for the brandy and ammonia. The left arm was found to be paralyzed. The catheter was again used. There being some tympanitis and considerable tenderness over the abdomen, I directed hot-bran poultices to be applied, and occasional turpentine frictions.

The third day afterwards, she had a mild attack of dysentery, which yielded readily to treatment. The paralysis of left arm only continued for a few days. At the end of three weeks, she had so far recovered as to be able to assist in her domestic duties, having fully regained the use of the left arm.

Remarks.—From a careful study of the case and the patient's history, I am convinced that the *cause* of the attack was *eccentric*, and that it was nothing more than the irritation arising from a large quantity of fæcal matter in the bowels. It is worthy of remark in this connection, that so soon as the bowels moved freely, the convulsions ceased. I admit that this may be a mere coincidence.

Treatment.—I have already said that I found the chloral hydrate altogether valueless. The inhalation of chloroform was of very great service, chiefly in preventing the occurrence of the successive attacks. If the first spasmodic movements were noticed, and the chloroform freely inhaled, it would prevent the spasm of the glottis from occurring. Its administration was continued for twelve hours. Before it was commenced, five or six convulsions occurred each hour; during its administration, not more than two, and sometimes only one, occurred each hour. As to asafœtida and valerian, I think they were of no use.

Venesection.—This was perhaps the most important of all the measures resorted to. It rapidly diminished the quantity of blood in the system, and hence it diminished also the liability to effusion of blood into the spongy parts of the body, as the brain and lungs, which is so apt to occur during the arrested respiration consequent upon spasm of the glottis.

Calomel.—The large dose that was given acted promptly. I have seen in cases reported in medical journals, the use of croton-oil advocated as acting more speedily on the bowels. I concede that it acts more rapidly, but it is itself a powerful irritant; and if the presence simply of fæces in the bowels would cause convulsions, then might we not infer that the croton-oil was contra-indicated? In conclusion, I might state that the total number of convulsions was above thirty.

ENTERITIS, WITH ABSCESS.

BY W. H. BLACKSTOCK, M.D., HILLSDALE, ONT.

I was called, on 13th April, 1869, to see Catherine W——, æt. fifteen, who was suffering from acute inflammation of the bowels. Pulse, 120, with pain, fever and tenderness very strongly marked. I immediately put her under my usual treatment for such cases, viz., large doses of opium, with small doses of calomel internally, warm fomentations and ol. terebinth., applied externally.

The pulse, fever and constant pain subsided in a day or two, but the tenderness did not; besides she was occasionally visited by alarming paroxysms of pain which nothing but free and repeated opiates would alleviate.

The case progressed in this way until about one month from my first seeing it, when I noticed commencing induration in the umbilical region, which in a week's time had spread over the whole abdomen, so that the whole abdominal mass seemed converted into an intensely hard, indurated tumor, in which state it remained for about three weeks, in spite of iodine, internally and externally, and all other means I could think of, or use, to induce resolution in the indurated mass. In spite of the induration and free doses of morphine that were administered to relieve the attacks of pain, her bowels were evacuated daily without the use of cathartics or enemata. Matters continued thus until about the end of the second month from my first visit, when I began to notice an appearance of softening near the umbilicus, which, with chills and general hectic symptoms, left no doubt that matter had formed. In about a week's time the abscess pointed at the umbilicus, and in a few days more discharged itself much to the relief of patient, her friends and myself. It continued to discharge for about another week, when it closed, and her health began to improve rapidly, with, however, occasional slight attacks of the pain, which, however, gradually left her, and she is now a healthy and well-developed young girl. She has been engaged in school-teaching for the last year or two, and is in the enjoyment of perfect health.

I have been induced to send you this case for publication as I have no recollection of ever reading or hearing of a similar one. You will perceive that I have merely given you the leading features of the case, as a detailed account of it would be very tedious, my attendance on it extending over a period of nearly three months.

CASE OF SUBCUTANEOUS NÆVUS OF THE EYELID,
TREATED BY INJECTION OF THE PER-SULPHATE
OF IRON.

BY MICHAEL HILLARY, M.R.C.S., IRELAND.

The following case came under my care while practising in the village of Stouffville, Ont. : Ida B——, a girl thirteen months old, of healthy appearance, was presented to me by her parents, who also were of good healthy constitutions. The child was suffering from a large sub-cutaneous nævus about the size of a walnut, situated on the right upper eyelid. It was rather diffuse and extended under the bony ridge of the orbit insomuch that it had pushed down the eyeball to a level of about one-eighth or one-quarter of an inch lower than the other side. The child was unable to open that eye, and the parents stated that the tumor was increasing rapidly in its growth. There were two cicatrices where electrolysis had been tried for its cure, and in those scars a capillary nævus was developed. On the child crying or becoming excited, the tumor enlarged considerably in bulk. On the conjunctival surface of the lid, the mucous membrane was thrown into large florid plicæ or ridges.

The parents stated that, from their description, electrolysis had been repeatedly tried, with the result of a large discharge of matter from where the scars were produced, but that on those healing up, the tumor steadily progressed in its growth.

Considering that electrolysis had been faithfully and skillfully tried for the cure of this tumor, and it having failed from, I believe, its not being able to make a sufficient impression on the bulk of the tumor—in fact it being quite plain that fresh vascular structure was rapidly developed in the parts destroyed by the electrolytic operation, I determined to try the injection of per-chloride of iron solution, but at the suggestion of Dr. Norman Bethune, I substituted the per-sulphate, and on the 17th of April of this year, placing the child fully under the influence of chloroform, with the assistance of my brother, Dr. Hillary of Aurora, I proceeded to inject the tumor. Filling a common hard-rubber hypodermic syringe with the Liq. ferri. per-sulph., and then being careful to exclude all air from it, I passed my finger under the eyelid and guided the needle half-way into the tumor. I then worked it round freely, so as to break up as much of

the vascular structure as I could, and then drove the liquid in until it returned back by the sides of the needle. This first injection I made rather to the outer side of the tumor, then I again injected it in the same manner on the inner or nasal side, meeting the other injection. About, I think, fully one drachm of the liquid remained inside, and the tumor was increased fully one-half in its bulk, and became as hard as a piece of cartilage.

On the second day after the operation, the line of demarcation of a large slough was plainly visible, and on the fifth or sixth day after, the slough came away. It consisted of a large portion of the tumor, with the coagulum formed by the iron solution. The opening left by the slough extended to the eyeball, leaving the ciliary margin of the eyelid intact. I then left it to heal by granulation, which it did very slowly, after the lapse of over three months, requiring the occasional touching of nitrate of silver and sulphate of copper to the granulations, and now at the date of this writing, it has healed completely, leaving a long narrow cicatrix at the fold of the eyelid, and the child can open the eye almost as wide as the other one. I think the sloughing away of a narrow portion of the eyelid was an advantage, as, if it were possible to remove the tumor without that occurring, an operation for ptosis would be called for, from the great stretching of the structures of the lid.

The case is of interest, as the use of per-chloride of iron in nævus has fallen into discredit from a number of fatal cases resulting from its use. The per-sulphate acts in the same way as a coagulant of the blood, and I cannot see the advantage of one over the other; in fact, as a styptic, I would give the per-chloride the preference.

In *Waring's Therapeutics*, third edition (Sect. 922), he states that it should not be used in cases of nævus about the head, face or orbit, and states that there have been several fatal cases from its use, and refers to case of Mr. R. B. Carter (*Med. Times & Gazette*, Sept. 5, 1863). A fatal case of Mr. Teale's, the younger, of Leeds, is also referred to by Gross; cause of death supposed to be formation of an embolus and its passing into the circulation. May it not have been from the incautious admission of air?

The carotid artery has been tied on several occasions for the cure of this disease, and seldom with success, and when such an easy method of cure as that by injection of either the per-chloride or

per-sulphate of iron exists, we should be very certain of their inability to cure and their futility before we throw them aside.

I think the reason of the want of success in the treatment of this tumor by electrolysis was from its deep connection in the orbit, and not being able by its means to—I may say—destroy the balance of power in the tumor. If I had only done what Erichsen and Gross recommend, that is, introduced a few drops at a time, I believe the iron solution would have been equally unsuccessful in effecting a cure; but I freely broke up the structure of the tumor before injecting the fluid, and then injected as much as I could get to unite as a coagulant with the blood. The syringe I used held one drachm, and I filled this twice, half of which returned back. There is one thing now I would wish to remark, that of the difficulty of introducing the needle. From the great constricting power of the iron, one would think he was driving the needle into a piece of board, but I think this can be readily prevented by first dipping the needle, prior to introduction, into a weak solution of potash or ammonia, which will neutralize the iron solution adhering to the needle. Then freely break up the tumor and inject as much iron solution as it will hold, or until it begins to run back again.

By the foregoing means, I believe a coagulum will be formed outside the vessels (not *in*, as according to Holmes), pressing on those structures, and so bringing on local sphacelus of the part.

TORONTO, Dec. 16, 1872.

METHOD OF USING THE PLASTER OF PARIS BANDAGE.

BY C. Y. MOORE, M.B., BRAMPTON.

The use of the plaster of Paris bandage in the treatment of fracture has of late received so much attention in medical periodicals that the readers of the *Lancet* may bear with a few hints on the method of using it—the more so as this part of the subject is generally omitted in the articles published in the journals.

The material used is good plaster of Paris finely powdered. It is said that the addition of a small quantity of common salt and powdered gum arabic is an improvement, but I have always

found the plaster alone answer sufficiently well. Let us suppose that we are going to put up a fractured thigh. The patient is placed upon a table, and the thigh is reduced and kept in place by an assistant, who holds the heel in the palm of one hand while the other has a light but firm hold of the instep and makes the required amount of extension. The patient is suspended by the loins so as not to touch the table. In country practice, the rings and hooks in the ceilings, found in the kitchen of most farm houses will be very serviceable, the table being brought beneath the one selected (which it should be seen is connected with the beam) and a long strip of cotton or something similar used for suspending the body, which should be far enough above the table to allow of the passage between them of the hand with a roller. Counter-extension is kept up by a strip of cotton passed round the groin of the sound side. It can be easily removed after the dressings have all been applied. Then the limb is enveloped in flannel from the toes upwards. It should fit closely like the leg of a pair of drawers and the edges be brought together by the ordinary glover's stitch. "The flannel should be old—a piece of old blanket answers best—as new cloth stretches after a time and works itself into folds and creases beneath the plaster.

The perinæum is covered only for a part of its extent. Then another piece about six inches or less in width is passed around the pelvis, its lower edge meeting the upper edge of the other and stitched to it. Then the limb is bandaged from the toes upwards by an ordinary roller without plaster. The roller is also passed around the part of the pelvis covered by the flannel. Next we put on the plastered bandages which are prepared by rubbing the fine powder into the interstices and rolling up carefully. The coarser the cotton used the better, as it holds more plaster. The bandage should also be narrow, say an inch and a half, so that it can be neatly applied, and care is to be taken that the plaster is not thrown in between the folds of the roller in lumps as it then goes on unevenly. It should be passed around the foot nearly to the toes, as it is from the malleoli that we get part of our extension. Lately, I have put the plastered bandage, except a few turns, around the foot after the rest of the dressing is completed. By this method, the hands of the assistant who is making extension are not disturbed until further extension in that way is unnecessary. The bandages are soaked in water, squeezed out, and applied in the usual way.

They should not be put into the water until they are required for use, for if they are kept in too long the plaster will set and thus render them comparatively worthless. When the first layer is put on, we sift the fine plaster over it and adding sufficient water in a small stream from a sponge, rub the mixture over the bandage so as to form a layer of pure plaster. Then we put on another layer of plastered bandage and one of pure plaster and so on until we have enough. The number of layers will depend upon the quantity of plaster used for each and upon the seat and nature of the injury, but for most purposes three or four will be found sufficient. A finished appearance is given by rubbing dry plaster over the whole, and those who have a fancy for engraving, sometimes ornament their work with a suitable design or inscription. The position of the limb should be carefully maintained until the plaster has set, which will usually be in less than an hour after its application. In fracture of the thigh it is important to have it of sufficient strength in front of the groin to prevent cracking, and a good plan is to supplement the other dressings at this part by a piece of flannel well filled with plaster, placed beneath the last layer. This method of treatment is especially valuable for fractures of the lower extremity, but its uses are very varied and important. I have treated fracture of the lower jaw very satisfactorily by Barton's bandage, the part about the chin being stiffened by the use of the plaster as above. I have also seen it used lately in a case of division of the tendo achillis where objection was made to the use of sutures. The foot was extended and the plaster bandage applied from the toes to the knee, a kind of window being left opposite the wound. The case is yet under treatment but has thus far progressed so well as to encourage the belief that union may be effected.

I say nothing of the results and convenience of the treatment. My object has been simply to give such facts with regard to the method of carrying it out, as I have learned by experience of its use.

ON THE ORIGIN OF FEVER.

BY N. AGNEW, M.D., TORONTO.

The essay read by Dr. Pratt recently before the Surgical Society of Ireland, has called forth a good deal of comment and discussion. Dr. Pratt says : " I have read a great deal lately in the newspapers, both English and Irish, as well as in the weekly medical periodicals, relative to the cause of typhoid and other fevers. The writers, abstaining in general from the production of any real facts, seem to be unanimous in attributing such diseases, in their inception, to the decomposition of animal and vegetable matter. They trace the first rise of the malady to malignant effluvia emitted from manure heaps, stagnant pools, drains, sewers, cesspools, and to all such heterogeneous accumulations as are found near the dwellings of the poor and farming classes, as well as to the gases arising from the closets and closed sewers of the rich, who fare sumptuously every day." He then says that, " after a quarter of a century's experience as a dispensary officer, and having had ample opportunities of becoming acquainted with the dwellings and habits of all classes of the community, it is his firm conviction that the agencies above indicated cannot be productive of fever of any type. Were it otherwise, Ireland would ere this be depopulated from sea to sea, or at most but sparingly and thinly inhabited." He then gives a graphic account of the abominable state of filth in which many of the people live and apparently thrive ; leading one to the conclusion that far more than the conventional "*peck of dirt*" falls to the share of the dwellers in the " Emerald Isle"—in short, a Benjamin's mess. Dr. Pratt's conclusion from his own observations is, " that it yet remains to be discovered from what mysterious sources those fatal maladies arise." In the discussion that followed the reading of the paper, Dr. Darby said, he " could corroborate every word of Dr. Pratt's paper by his own observation." He did not think that " the disease called typhoid could be traced to any distinct source." Dr. Stokes said that, " While the presumed causes of fever are permanent, the effects are not permanent, but intermitting, or at least remitting." He remembered when there was a tremendous epidemic of fever in Ireland, and when Cork and Limerick were the centres of the plague, the town of Killarney nearly escaped. The

grand jury of Kerry ordered an investigation, and it was found that the filth of Killarney was enormously greater than that of the plague-stricken towns! None of the gentlemen propounded an hypothesis as to the probable source of typhoid in Ireland.

Dr. Sharkey, of Ballinasloe, in commenting upon Dr. Pratt's paper, and the discussion it evoked, brings forward what he regards as a "crucial instance": A family, living in the midst of filth, held out for a long time, but were at last attacked with typhoid. No typhoid or any other fever had been in the parish for months. Dr. Clark, of Cohoes, N. Y., in the December No. of the *Canada Medical and Surgical Journal*, brings forward numerous cases which occurred in his practice, to show that the cause of the fever was to be found in certain stagnant pools which infected the air and drinking-water of the neighborhood, and showed that persons working in the infected district, but living at a distance, escaped.

"Doctors differ" has passed into a proverb, and nowhere could a better example of the fact be found than in the opinions held in reference to the origin of typhoid fever. Dr. Budd says that it originates in the fæcal matter discharged by an infected person finding its way into the ingesta of others, and many fanciful explanations of how that may occur have been offered in difficult cases. One might be pardoned for asking where the first infection came from? Clearly, Dr. Budd's chain lacks a link. Dr. J. Hughes Bennet believes that it is caused by poor diet. Dr. Tanner says that it is generated by putrefying animal matter, the effluvia from foul drains, or the contamination of drinking water by decomposing sewage. Dr. Wood, of Philadelphia, says that "nothing precisely is known of the cause." Some are dogmatic, having proved to their own satisfaction that their theory is correct. One thing is certain: many of the causes said to produce it in Europe have no existence in localities where typhoid is found in Canada. Cases have occurred where contagion was out of the question—where there were neither foul drains nor sewers, nor sour wines and poor diet, and where the fæcal poisoning theory was impossible. Some are disposed to adopt the opinion that typhoid is nothing more than an aggravated ague, and that it is produced by the same cause. The fact that typhoid often occurs in winter, during the hardest frost, *and when there is no intermittent*, rather militates against that opinion. The various and conflicting opinions only show the necessity that

there is for more extended investigation, in order that differences may be reconciled and a more determinate etiology discovered.

Without indicating any opinion of my own, I will mention three examples that occurred in my practice, in support of three of the principal theories of origin. I could give many more equally puzzling. Some years ago, I was asked to see a case in consultation. The patient, a man between fifty and sixty years of age, had been ill with *well-marked* typhoid for several weeks. His son, a young man, lying in the same room, was convalescing from *equally well-marked* typhus. In searching for the probable cause, I discovered a large hog-pen a few yards from the back-door of the house, and close to the well, whence water for the use of the family was obtained. The cellar under the house was filled with turnips, and I found that about one hundred bushels of them were rotten. I had the cellar cleaned out and sprinkled with fresh lime, and well ventilated. But the hog-pen was too sacred an institution to interfere with. "It was so handy for the women to have it near the house." Now, did these sources of putrescent exhalations cause these cases—one typhus, the other typhoid? If not, whence the poison? If this was the cause, why did the other members of the family escape?

I pass to the next example: I was called to attend a young man who had just arrived from California, *via* the Isthmus of Panama. He felt rather unwell in Aspinwall, but managed to reach home. He had a severe attack of well-marked typhoid; head symptoms distressing, delirious for several days. Ultimately he made a good recovery. During his convalescence, a little sister, eleven years of age, was taken ill, and a few days after a brother. The little girl became very ill immediately, uncontrollable intestinal hæmorrhage supervened, and she sank and died. As a natural consequence, I was discharged, and another doctor called. Three other members of the family were taken ill. The gentleman in attendance called a friend in consultation, but notwithstanding their efforts, three of the four cases died—four out of six, a severe mortality! In this last example, the sanitary condition of the house and surroundings was unexceptionable. The house stood upon a dry knoll at a considerable distance from the farm-yard and offices; the well was perfect; the habits of the family scrupulously clean; the dejections from the patients carefully disposed of. Here, at least, the pythogenic theory of origin breaks down. Was it contagion? and were the

germs of the disease imported and diffused by the young man from California? At first sight, it would appear reasonable to adopt that view; but neither the neighbors, who acted as nurses, nor the medical men in daily attendance were affected, and no other cases occurred within several miles! About five miles distant, quite a number of cases occurred. I had eight in one family, four in another, and three in another, at the same time. Some of the cases were severe, but *all* recovered. In these last mentioned cases, no local cause could be assigned.

Now, what conclusion can be deduced from the foregoing facts? The first cases favor the pythogenic theory, the second cases the contagious, and the last the miasmatic.

CORRESPONDENCE.

To the Editor of the "Canada Lancet."

DEAR SIR,—In your Journal for December you publish an extract from the *Boston Medical and Surgical Journal*, under the heading "How Homœopathic Converts are made," and speak of it as amusing—perhaps it is; but I feel confident, sir, that you could not have been aware of the true history of the case, as your love of justice and fair play, which I think is generally so apparent in your *Lancet*, would have caused you to hesitate before clipping it for publication. The extract as a whole is false, and good men of every shade of medical faith must condemn the motives that prompted its construction. * * *

The whole affair, doubtless, arose in a very harmless way. Dr. Simpson feeling that a fine opportunity was afforded for getting off a good joke at Dr. Henderson's expense, and through him, Homœopathy—published an account of the unfortunate box—which in the heat of excited controversy, received a warmer coloring than was justifiable. We can find no other excuse for Dr. Simpson, and it is to be regretted that he did not offer an apology to Dr. Henderson, when he became aware of the true facts, which would have been both becoming his dignity and position.

Professor Henderson considered the joke of far too grave a character to be allowed to pass in silence; and in his preface to the first edition of his masterly work, "Homœopathy fairly represented," he replies:

"Now we are at direct issue concerning the trumpery story which Dr. Simpson has related about a box of Homœopathic medicines, which had once been "his own former Homœopathic box," and while it was so, had its contents of many phials mixed together, as he says, "by some juvenile member of his family, but which, notwithstanding, had been the means in my hands of so convincing me of the truth of Homœopathy, that some time afterwards, I assured him, as he avers, that I had seen wonderful effects and cures from using the drugs contained in it," or, as he said to myself, (in a conversation we had on several memorable topics before he published this altered version of the words put into my mouth,) were my actual expressions: "Yon box has converted me." To both versions I give now, as formerly, an unqualified denial, and for the simple and sufficient reason, that for me to have uttered either the one or the other would have been an untruth. In the words of my former refutation of the whole fable, "my first experiments in Homœopathy were made by medicines obtained from five different sources, in addition to Dr. Simpson's box. The respected Secretary of the Medico-Chirurgical Society favored me with a box, in connection with which there was, as became his character, no trick, but all that was fair and honest. Dr. Russell supplied me with many medicines, Headland, of London, did so too; the Chemist of this city, at a later period, did the same; and some I prepared with my own hands. The results were published, and drew from Dr. Forbes, of London, the admission, that had the cases been treated according to the ordinary school, he would have regarded the results as "very satisfactory." Among them were some "wonderful effects and cures," which I have always regarded as evidences of the power of Homœopathic remedies; but that they were due to Dr. Simpson's own former Homœopathic box, in which the trick was, I do not believe that I could have averred, because I was not in the habit of noting in each case from what source the medicines I employed were taken, for I suspected no trick. Since Dr. Simpson has made his trick public, I have suspected, reasonably enough, that some of the failures which I could not formerly account for, but on the ground of my own want of skill, must have been due to the dishonest 'box.'"

Dr. Henderson goes on a little further to explain how impossible it was for a child to have tampered with the box of medicines in the way that has been stated, since every phial, of which there were sixty-six, had the name of the remedy in Latin, labelled on the glass and on the cork.

"Now," he says, are we asked to believe that a child of some three years old, in the habit, as is alleged, of uncorking the bottles of his "occasional plaything," emptying its contents into a heap, and then refilling them from the general mass, was so precocious a

scion that he could replace each cork of the sixty-six in its proper place, according to its proper inscription? And if not, as is perfectly certain, what learned Theban was at the trouble to re-adjust the disordered elements of so despised a machine."

The extract further insinuates, that after Dr. Henderson adopted Homœopathy he was obliged to resign his position as physician to the Infirmary, and his chair, (Pathology), in the University. Nothing could be more untrue. As a Homœopathic physician, in justice to his convictions, he could no longer treat the Infirmary patients according to the old rules of medical treatment, so he honorably resigned his position in that institution. His Professorship he held, notwithstanding that every effort was made by his enemies to dislodge him, up to within a short time of his death—which happened not long since—and he only resigned then in consequence of failing health caused by his fatal disease, Aneurism of the Aorta. It may truly be said that no Professor in the University was more highly esteemed and beloved by his students than Dr. Henderson; and his kindly and obliging manners won for him the respect of even his most bitter enemies.

Hoping you will see the justice of giving space to this defence of truth in your valuable journal,

I am,

Yours Respectfully,

ALLAN M. RING.

ST. JOHN, N. B.

To the Editor of the "CANADA LANCET."

SIR,—"*Vivere medicé est vivere misere*," is an old aphorism, the truth of which I think we all, sooner or later, realize. I have often thought there are few *medicos* that have been even three years in practice, who, if they had the years of their youth to re-live, would ever put a knife in a *cadaver*. Practising in a city is sometimes bad enough, but we poor fellows in the country have a hard time. What with bad roads, bad weather, bad cases, bad pay, long journeys by day and night, ignorant and stingy patients, the bother of preparing and carrying our medicines, the intermeddling of quacks, and the dearth of cultivated society, we do live miserably enough.

I sometimes feel that I would like a little sympathy and advice

from my confreres on certain points connected with medical ethics—a subject, I must say, too much ignored amongst us. For example :

A young school-teacher, a fresh arrival in my neighborhood, who had, a short time previously, married a widow, the mother of five children, and tolerably well supplied with the needful, not long since roused me at 2:30 A.M., in a very peremptory and discourteous manner, to attend his wife in labor. I immediately dressed and hurried to the house, to find that there were no uterine contractions, nor any need of my presence. I stated I could do no good then, but promised to call again before I started on my daily round. At 8 A.M., the husband, passing my house, told me abruptly, without any explanation, that I need not come. I asked if the patient was all right, and he said "No." In the afternoon, being at a public meeting, he came to me, nudged me or pulled my clothes and walked off homewards in a most independent and imperious manner. I followed him for some distance, but finding that he did not turn around to explain, I felt so like a little dog following his master, that I turned back, went home for my case of medicines and thence to the patient's house. On being shown upstairs to her chamber, I entered and found the woman sitting on a chair, with the husband beside her and his arm around her. The expression of pain was very slight, and as I had had a call to a considerable distance, I was anxious to get through my day's work before dark, and would have been glad to have examined the patient, so as to form a judgment as to the necessity of my remaining. I waited for a little time, scarcely knowing what to say before the husband, and feeling myself *de trop* in the lady's chamber ; then descended to the kitchen, where I encountered the patient's sister—I believe also a married woman. She immediately interrogated me as to the patient's condition. I told her I really could not tell anything about it, as her husband was there and I had had no opportunity of judging. I also asked if he was not going to his school that afternoon. She said "No," and stated that he could not leave his wife, but had remained with her all day. She, however, volunteered immediately to remove him from the bedroom. Judge of my surprise when, on her going out, the husband came down in a towering passion and told me, in a most insolent tone, without my speaking a word, that he wished to know who had the best right to remain in the apartment—the wo-

man's husband or the doctor. Of course I did not dispute the husband's right to be there, but I told him quietly that I should be ashamed to act in his presence and that it was contrary to the rule that husbands should remain with their wives during confinement, intimating that in such a contingency he must not calculate on my services. I then proceeded towards the front-door, when he rushed ahead of me, planted his back against the door, ordered me in a most insulting manner to go and attend to his wife, and repeatedly threatened to prosecute me if I refused. Though I am not of so ponderous a corporation as Sir John Falstaff is represented to have been, yet I so far resemble him as to be unwilling to give either "a reason" or anything else "on compulsion," and finding that an intimation to my opponent that he was imprisoning me was useless, I used physical force, grasping him by the collar with both hands and swinging him from the door, although he was a very large and powerful man. Seeing that I was not to be intimidated, he then said that he would stay out of the room, whereupon I stepped outside his house and said, "Ask me civilly, now, to go and attend to your wife and I will do so." He obeyed, saying, with the air of a whipped urchin, "If you please, will you come and attend to my wife?" I did so and all went right, nor did he venture into the room until I came down stairs, after the bandage had been applied, and told him his wife would be glad to see him now. I never had any disagreement previously with the foolish fellow; in fact, he was almost a perfect stranger to me.

Now, I wish to know—

1. Was I justified in declining to act in this case when I knew I should have the presence, and most probably the insolent interference of the husband during the wife's confinement?

2. Was I liable to punishment for assault in removing the husband from the door when he barred my egress and menaced me with prosecution?

3. Did my visit at 2:30 A.M., and a previous consent to attend to the woman, make me liable for the consequences, had I left the house before the accouchement?

If this be the case, under such circumstances of provocation and brutality, God help us all! Perhaps it is a weakness on my part, but really it embarrasses me so much to have any man who is not a medical man in the room with me at a confinement, that I

cannot with comfort discharge my duties. To make a vaginal examination before such a fiery and jealous-minded husband as the one I refer to would be exceedingly distasteful to a right-minded practitioner.

Bear with me a little longer ; I want some more information. Within the last few months, two quacks have come into my neighbourhood to practise. One of them boarded at a hotel, drank plenty of whiskey, sometimes, I believe, attended bar, patronized the druggist with a few prescriptions, got into his debt and then suddenly left for parts unknown, without paying his board-bill, having tried to victimize another party by attempting to borrow money on his departure. He professed to have obtained his qualification at Queen's College, Kingston, but the druggist told me that he did not know the meaning of the word "auscultation," and said that he had never heard it. His *alma mater* need not then be very proud of him. The other one is still in the locality. He is a blacksmith by trade and a very illiterate old fellow, but endowed with the most sublime effrontery. He hunts up cases. It is chronic cases he says he wants. He is afraid of getting into trouble with acute ones. He had the assurance to "call upon" me, when I asked him if he had complied with the law. He seemed to know nothing about that, but said he had been very lucky in his practice, particularly in "mid-wife-ry," that he could not work at his trade now, and had to get a living in some way. He lately persuaded a patient of mine, in phthisis, to place himself under his care, with an assurance that, as the patient's lungs were as sound as his own, he would have him jumping as high as a rail-fence in a month's time. To realize these sanguine expectations, he used rather sanguinary measures ; for he pulled out a lancet and bled the unfortunate youth. The patient had hitherto been able to walk and ride about, but the venesection sent him to his bed and perhaps to the shades, for he was dead in a few days.

The ill-gotten gains of such men form no source of annoyance to me, but there is a very great annoyance in having such persons in your neighbourhood. They propagate falsehoods which you have no power to contradict, and your patients, in an emergency, will call in any one who goes by the name of "doctor." Under such circumstances, these pseudo-doctors will not leave when the regular practitioner is called in, but hang on in order that they may have it

to brag of that they have met Dr. So-and-so in consultation. You know that

"A lie that is all a lie may be met and fought with outright,
But a lie that is half the truth, is a harder matter to fight."

Such people, however, do not hesitate to circulate lies that are all lies. The person in question makes use of my name freely, stating that it was I who recommended him to settle where he is, and boasts that in a certain urgent case to which he was called, I, being subsequently summoned, had publicly stated that the treatment was excellent and I could not have done better myself. This man has "Dr." painted on his door, and otherwise contravenes the Medical Act. He goes, under pretence of buying a pound or two of butter, to any farm-house where he hears there is likely to be a "case" to suit him, and there solicits employment. I wish to be informed if the law provides any means of protection against the assumptions of this man, particularly in connection with my name. I am ready to give his address to the Registrar of the Medical Council, but I fear that functionary either will not or can not afford any aid in the matter. If so, *Cui bono*, Registrar? *Cui bono*, Council?

I must say that I sympathize with the movement of the students. The regular profession suffers great injustice. In my own case, for example, the law has been obeyed in every particular. The first licence I had to practice was an European university degree. The document alone cost me about £27 or £28 sterling. Of this, £10 went to the Queen for stamp duty. Then I took a surgical diploma, which was another valid and expensive licence. I registered in Britain, and had to pay for that. The Imperial Act states that this registration entitles a man to practice in *any part* of her Majesties Dominions. I also paid for the licence of the Upper Canada Medical Board. After a time the law nullified this and required us to register. Not wishing to entrust my parchments to the post, I had to undertake a journey to Hamilton and pay for this process also; the law making me, against all my honest convictions, a member of another and hybrid institution. And now, after being licensed over and over again, what does it profit me? I can recover my debts in a court of law, if I am fool enough to go to law with my patients. But my friends, the tinker and the teamster, can recover their business debts in court without any licence or registration. Oh! I am legally entitled to give evidence in a court of law. Yes, and in cri-

minal cases, get nothing for it. If registration would *save* us from this privilege it would be of some use. Not long since I had to attend at the Assizes for three consecutive days at my own expense, and to the disappointment of my patients, without even a "thank you" for the expenditure of my time and money.

I would ask, sir, what is the use of keeping the Council in existence if every pretender who styles himself "Doctor" is permitted to place himself on a par with educated men who have complied with the law? But you may say, the Council has raised the standard of education. So far so good. But that refers only to legal practitioners. The good in this respect is neutralized by the tolerance of quackery. We had more protection before the Council came into existence; for I can well remember, in the Tumblety era, that profound student of human nature was fined \$100 and costs for assuming the title of "Doctor" and practising without licence. If we had a bill passed containing a stringent penal clause, why could it not be made a part of the defined duty of the clerk of every municipality to apply, within a certain time after the arrival of any person in his municipality who professed to be a practising physician or surgeon, for his credentials, and if necessary to submit them to the examination of the County Attorney, who could act according to law in the premises.

Respectfully, yours,

LIVE AND LET LIVE.

Ontario, Dec., 1872.

To the Editor of the "CANADA LANCET."

DEAR SIR,—If you will kindly insert the following P. S. at the foot of the card, which your correspondent, R. Tracey, in the last number of the *Lancet* copied as mine, and with which he attempted to place me in a false aspect before your readers, it will tend greatly to explain itself:—

N. B.—This announcement, [referring to the card,] was, and is still intended as a public refutation of the slanderous falsehoods industriously circulated by members of the Medical profession in Belleville, for five months, to wit: That I was not qualified, not registered, was a quack, only a Yankee doctor, and latterly, that I was not going to remain in Belleville, &c., &c. Hence this synopsis of my medical education and career, to settle the matter publicly, and brand my calumniators with the infamy they deserve.

BELLEVILLE, Nov. 12, 1872.

These gentlemen, without availing themselves of the proper avenues of correct information, in the face of my proper introduction by my partner, Dr. Dorland, prior to his departure for Europe, and in utter disregard of all accepted ethics of the Medical profession in any civilized country, made a most disgraceful and unworthy attack upon my professional character in public as well as in private. At first I treated the matter with silent contempt; but after a forbearance of five months, and with no card of mine in the daily papers to refute the constantly recurring malignant assertions, I issued a synopsis of my education and medical career, as well as my professional titles and appointments, for public verdict. This card formed the subject matter for your correspondent, R. Tracey's letter, and in a guilty spirit of recrimination he dilated somewhat upon it and distorted it considerably. My card presented no features very different from others of the profession in Belleville, unless in numerical superiority of titles and appointments. Not one word of vaunted superiority in any class of diseases; but my education in Foreign and British Schools was with my career, laid before the intelligent public for their judgment as to my fitness, and their confidence in a professional capacity. It happened also about the time I arrived here, that a change was taking place in the Medical Registrarship, and in spite of my endeavors to be registered speedily, (a system I heartily uphold,) delay was unavoidable, but immediately the new Registrar assumed office I was registered forthwith. With more virulent animosity than guardian zeal for the profession, these gentlemen made the most of this delay. Your correspondent's raillery at my calling in a little French, and about as much German, is exceedingly puny; for here his evident inability to translate a very simple sentence in French and German proves his wit to be exactly in inverse proportion to his ignorance. * * *

We have a mixed population of French and German in Belleville, as elsewhere in Canada, besides British Americans, whose education enables them to make that use of my announcement which I intended. Personally, I detest the current style of medical cards in newspapers, preferring rather to relinquish "the shop" to shopkeepers, and thus preserve our distinctive claim to being "professional gentlemen" in its integrity. But *O tempora, O mores!* after quietly enduring five months relentless and insidious defamation of my professional character, and "patience had ceased to be a virtue,"

I was constrained to follow the example of the "*grex vulgus*" and inserted my card in the papers, not descending to R. Tracey's pettifoggish expedient however, of utilising barber's shops, saloons, &c., for advertizing purposes. His crying "peccavi" is cheap atonement forsooth, after reaping for a year or more by his procedure, unfair advantages as we may infer in all reasonableness. He utterly fails, in inviting comparison between his expedient for obtaining practice and mine, and he contrasts badly as the result.

Not long ago a member of the profession here made a hasty trip to England, and upon his return duly announced himself as a "member of the Anthropological Society," "member of the Obstetrical Society," &c., &c., *in extenso*, so then, that my detractors furnished me with most excellent precedents in the advertising line will generally be conceded. * * * Ill disguised and disappointed, greed for the pickings of my partner's practice, on the occasion of his departure for Europe, has had much to do with the true animus of this controversy, but I held too tight a rein upon public confidence to suit them, and proposing to continue my hold, by devotion to my own and not other peoples' business, I leave them to their own reflection, calling to my aid for their edification (and that of their mouth piece, R. Tracy, your correspondent, especially,) a little Latin, since French and German proved so indigestible, *sera nunquam est, ad bonos mores via*.

Yours respectfully,

EDWARD CLAPHAM.

Belleville, December 24th, 1872.

[To the Editor of the Canada Lancet.]

DEAR SIR,—In your December number, I find a communication over the signature of Dr. Cornell, which, in point of erudition and research, deserves more than a passing comment. I have often puzzled my brains about what the doctor so elegantly calls the *pathy*; and, though I have a medical dictionary, I never could fully understand it. How simple it seems now! what lucubration, what toil he must have had! But then perchance to him it appeared perfectly facile, one who understands Greek as well as he does, Arabic and Latin and Hebrew would easily master the idea. I am sorry that the doctor did not give the vernacular of his quotation from Greg-

ory ; do you know where I could obtain a cram copy of the work ? I am afraid it is getting very scarce. All must admire the modest candor with which he acknowledges that during his term or terms as medical examiner he literally did nothing and was paid for it. We knew that, yet it goes to show that there is nothing vulpine about him ; the time has come, he thinks, when like Wolsey, " he must lay his honors down ; " nevertheless, he can say, that he has left all correct *en famille*, and that is something to have achieved. There are some who say, that the Eclectic quota of the Medical Council did not exhibit a fair representation of the talent, &c., of the Eclectic profession ; but this is after all only an opinion. I believe it is Burke who remarks, " That because half a dozen grasshoppers make the field ring with their importunate chink, whilst thousands of great cattle reposing, chew their cud and are silent, you are not to imagine that those who make the noise are the only inhabitants of the field." Some of the small fry of the Eclectic Medical Society, who are allowed to worship at a distance, like the bruised worm, turn round, make use of adjectives, and ask why their names are dragged into print to serve a point or help the large tadpole to display the ego. Myself and—write to me—is the Alpha and Omega, like a woman's postscript it contains the gist of the whole. I concede the fact that certain persons did sign their names to a proposition to the Medical Council of Ontario, but they deny the right of any person (who having for a distinct purpose obtained the same) for his own ends to ventilate their names in a public journal without either leave or licence. When Dr. Muir published a communication through your periodical, he only expressed his own views, which he clearly had a right to do ; but Dr. Cornell goes the whole length, abuses private confidence, and exposes that which was never intended for the public. I am not surprised at what he has done or published. I merely give vent to my feelings and that of others on the subject—" *Nemo mortalium omnibus horis sapit*," and rather foolish some of us feel over it ; to speak vulgarly, we have been sold ; disgusted with the men or a portion of them who have by the unfortunate indifference of most of us been thrust forward by a clique as our representatives, we care not now to move in the matter ; most of us accept from necessity the situation we are placed in, but we disown the would-be leader.

Yours respectfully,
VOX.

[To the Editor of the Canada Lancet.]

DEAR SIR,—What are we to understand by the terms, “Legally qualified practitioner,” and “General profession”? In the December issue of the *Lancet*, the names of several gentlemen are given as being desirous of merging in the “General Profession.” One of these, to my surprise, is a man whom I have seen travelling through the country, styling himself “The Great Physician,” curing all manner of diseases by magic. His examinations were gratis; his charges for drugs moderate; his belts for cure of rheumatism only \$3½; and his cure for goitre simply the laying on of hands, or “rubbing down;” because, as he said, he happened to be the seventh son. I wonder if this power had anything to do with the reduction of a certain case of strangulated hernia, which occurred in the person of Mrs. P——, to whom he was called; if so, the assistance of another physician of less pretensions was necessary. Now, sir, are we young men who are compelled to spend so much time in acquiring both literary and professional knowledge to be classified with such men as this? To herd as it were with rapacity of the vilest character because clothed with legal dignity? No! I mistake the character of the writer of that article if he would not revolt against such miserable quackery.

Yours truly,
MEDICUS.

Toronto, Dec. 16th, 1872.

Selected Articles.

THE INFLUENCE OF THE MENTAL OVER MAN'S PHYSICAL FORCES.

We prick the finger with a needle, and instantaneously a nerve of sensation gives us an intelligent idea of violence. By the aid of the scalpel and microscope we are enabled to follow up the nerve fibre to its starting point. No sooner has the sensation reached what we are taught to call the root of the mind, the brain, than another set of nerve fibres spring into action, and at once withdraw the finger from further injury. These nerves of sensation and motion

are simply prolongations of the medullary substance of the brain, spinal cord and semi-lunar ganglia, which find their way to every part of the body. Had no other office been assigned to the brain, than the control of these forces alone, it would have a duty of highest importance to perform. But we have an office assigned it infinitely higher than that of sensation or motion. The brain is the workshop of man's mental forces; this he will neither assume nor deny, holding either position beyond demonstration, but simply ask, where are the nerves of thought? Are they wrapped up in the gray or white substance of the brain, to grow and strengthen as Prof. Agassiz advises us, by eating fish? or as Mark Twain pertinently suggests, a whale? Or are they lying loose in the front and large portion of the brain, the one-fourth of which I have seen a boy lose, from a fracture caused by a gunshot wound, without affecting his mind? But the object of this paper is not so much to hunt up the exact location of man's mental forces, as to show their influence upon physical organs, the exact location of which we do understand, together with their functions. That a man may enjoy good physical health with a very feeble intellect is a fact so well established that but few will controvert it.

But the converse will not hold good; the immortal part of man, that which was made in the likeness and image of the Infinite, is dependent for its proper, full and vigorous development upon the healthy and well-developed condition of all the physical organs.

A man is no more capable of reasoning correctly who is in confirmed hypochondria, which we have been taught to believe has its origin often in the derangements of digestion, than he would be with softening of the brain, or, if you please, with a tumor on the brain. Yet the mind, so to speak, may dwarf the man physically to such an extent as to cut off its own supply; and it is this, as guardians of the health and preservation of our race, that we are daily called upon to consider, and, it may be, to correct. The influence of the mind is more frequently, and, perhaps, more directly, felt upon the stomach than any other organ. Who of us has not sat down to dinner with a keen relish for the good things set before us, when some sudden news, depressing, perhaps, in its character, has in a moment induced satiety. Intense grief or fear is said to have changed the color of the hair in a single night from black to white. An over anxious feeling, coupled with hope and doubt, is very apt to increase the secretion of

the kidneys. Prurient thoughts will increase the secretion of semen; the cry of a young child will start the lacteal flow in the mother; the fear and dread of a cancer have, without much doubt, converted a simple fibrinous tumor of the breast into a malignant one; putrid or disgusting objects may produce emesis; and there is but little doubt but that the mental emotions may be so operated upon as to cause an attack of diarrhœa. And so we might go on until we had enumerated nearly all of the secreting organs of the body. Men, in good health, meet with some little reverse in their business; they grow anxious about it, loose sleep and appetite, then they worry because they cannot either eat or sleep, until they become sick. The physician is told everything but the truth, when he proceeds to worry them additionally with drugs. When death supervenes, they die of "softening of the brain," a very convenient disease for men to die of; the skull is so thick that you cannot conveniently feel the brain through it; and then if an autopsy is made, why, the brain is always sure to be soft, which proves eminently satisfactory to the friends.

A sick person grasps the thoughts of a physician the moment he enters the chamber, and he holds them as if they were things tangible, just as he does the outstretched hand, only he holds them long after the doctor has gone on his weary way. Hence the quiet, cool, easy, cheerful, self-possessed, confident doctor, is always the successful practitioner. A physician once wished to compliment a lady, who had brought a floral tribute to one of his sick patients, and while looking upon the little bouquet of flowers close to the blanched cheek, he politely remarked that he once knew life and death poised in the balance, and the delicate odor of the citron turned the scale in favor of life. While this may not be literally true, it is not without its effect, and it is as much the duty of a physician to look after and control that spirit essence, or subtle essence, the mind, as it is to know that the stomach has been relieved of its noxious bile, or that the fevered pulse now keeps pace with his own. The finest medical lecture ever given, at least in so short a compass, was by Solomon; it is this: "A merry heart doeth good like a medicine, but sorrow is as rottenness in the bones."

It is a common saying that you must have faith in a doctor, or his medicine will not cure you. Now confidence and trust in a physician's skill is, no doubt, oftentimes fraught with good results. The solution of this is that the mind is relieved, in a measure, of its

anxiety, ceases to concentrate itself upon the diseased organ ; but this is not so much a cure by faith as it is a cure by mental over physical force. It is not only that one's own physical organs are influenced by mental force, or mesmeric force, but that through the latter, or nerve force, one's mind exercises a material influence over another's physical organs. This pertinently suggests the necessity of a thorough study and knowledge of human nature, by the well-educated physician. It is not unfrequently the case that we find physicians eminently qualified to practice their profession who are very unsuccessful in their practice. Why is this? It is certainly not because their diagnosis has been faulty, neither is it because improper medicines have been used ; but it is because the mind of the patient is stretching forth its delicate tendrils—may be bruised ones—found nothing to refresh and strengthen them. Simply because the souls of the physician and patient, or their minds, did not seek to get acquainted with each other. This certainly is the chief cause of their failure, and tells us very plainly that our minds, our souls, our thoughts, must be administered, as well as our drops and pills, if we would successfully combat disease.

We occasionally meet persons with imaginary diseases—imaginary in the beginning, but real in the ending. Again, there are some persons who have had real disease, been thoroughly cured, and yet their minds, so to speak, remain so full of the disease that they cannot be made to believe they are well, and a depressing influence is thus brought to bear upon their general health, closely allied, if not akin, to the trouble they have been cured of. Now, blister, plaster and quinine will not relieve this class of patients ; they can only be cured by administering to what we have been taught to call a diseased mind an equal amount of healthy mind.

How is it to be done? Well, there comes the rub ; it is enough for my present purpose to say it must be done. Association occasionally develops disease, for instance, chorea. A boarding-school miss gets sick, recovers in a degree, but there remains with her an involuntary motion of some of her limbs, beyond her control. This occasionally extends through an entire class, almost as much so as rubeola or pertussis would. This, of course, I do not class as a disease of the mind, but rather as one that may be caused by acting through the mind. One other class of patients and I am done. A patient comes to you, a highly intelligent gentleman, a lawyer per-

haps, may be a divine ; he has read a great deal, he has thought a great deal, and no doubt but he knows a great deal in his line. He holds in his hand an advertisement, which he has cut from a newspaper, of some patent medicine man, or it may be a leaf out of Jayne's almanac ; possibly some disciple of Hahnemann has sugared him up by his description of the aches and ills that flesh is heir to. Now, he wishes you to distinctly understand that he does not believe in patent medicines, and as for those little pills, he thinks nothing could be more insignificant. "But then," continues he, "they have described my feelings better than I could do it myself, and it may be possible that this is just what I need." You examine the case carefully, and find instead of his needing a "Liver Invigorator," "Lung Balsam," Blood Purifier," or "Catarrh Snuff," that he has simply overtaxed himself, both mentally and physically, until he can easily imagine aches he does not feel. But there is still another, and perhaps better reason ; it is this : nearly every patent medicine man describes about the same class of symptoms, in about the same words, no difference what the disease he is describing. This is not noticed by the general reader. It requires only a little careful wording, with a moderate degree of ingenuity, to tell a man about how he feels, for there is scarcely any sick man who feels well. A little address may be well in the beginning ; for instance, preface your remarks with, "You know from your own personal observation that he is a man who will not give up to trifles ; that he has a general feeling of languor and debility all over ; an occasional chilliness, followed with more or less fever, flashes of heat, a general aching all over, an occasional palpitation of the heart, a little nervous, will start suddenly if frightened, irregular appetite, cannot sleep well, a little running round of the head if he stoops down and rises up suddenly ; after eating a hearty meal he gets up from the table feeling full." Now, this will satisfy nine men out of ten. Of course, I need not here remark that this is all absurd, but nevertheless it is kindred stuff, through patent medicine advertising, that causes a great deal of the diseases of both the mind and body that we are called upon to treat, and I merely refer to it to illustrate the action of the forces of which this paper is the subject.—*Dr. Jones in the Medical and Surgical Reporter.*

A TEST FOR PUS.

[Dr. Day, of Australia, has made some interesting observations on pus, which we quote from the London *Medical Times and Gazette*.]

"In 1868," he observes, "I had the good fortune to discover a very delicate test for pus, and have since been in the almost daily habit of applying it, in conjunction with other tests, as aids to diagnosis. In this way I have learned some very interesting facts regarding the properties of pus. For instance, I have found that healthy pus, when dried, becomes chemically inactive; although, when moistened with water, it again resumes its chemical activity; also, that pus derived from persons suffering from diseases allied to erysipelas, possesses unusual activity—more than that from healthy persons—and which it is capable of retaining for years.

"On this paper are two spots of pus, which had been allowed to dry by exposure to the air. To one has been added the pus test alone, with, as you may see, a negative result, dry pus being devoid of chemical activity. To the other a drop of water is added, and then a drop or two of the pus test, with the result which always follows the application of this test to most pus—namely, a bright blue reaction.

"I mentioned just now that pus secreted by persons suffering from diseases allied to erysipelas is more active in its chemical properties than healthy pus. On this piece of glass is some pus taken from a large carbuncle on the neck of an elderly gentleman two years and three months ago. He was suffering from symptoms of blood poisoning at the time. This pus, as you will see, although it has been freely exposed to the air during the whole time, and sometimes to great heat, still retains its power of acting chemically on the pus test; and it does so even when dry, thus showing that it possesses greater chemical activity than ordinary pus.

"You will perceive that, in the explanation I have attempted regarding the influence of moist and dry air over the propagation of erysipelas and its allied diseases, I have assumed that when the chemical activity of pus is suspended, its power to act as a poison on the system is also suspended.

"I will trespass on your time by bringing one other experiment under your notice, as it may help to explain the *modus operandi* of Prof. Lister's antiseptic treatment of wounds.

"I have found that carbolic acid possesses the property of entirely and permanently destroying the chemical activity of pus, whether derived from healthy or unhealthy persons. On this paper is some pus which had been moistened with water, to give it chemical activity. A few drops of watery solution of carbolic acid were then poured over it, and after the lapse of a quarter of an hour, the pus test was applied, with, as you may see, a perfectly negative result."

Dr. Day's pus test is so simple in the mode of appliance, and apparently so certain in its revelations, that we have little doubt it will soon come into daily use as an aid to diagnosis. He prepares his test fluid by exposing a saturated alcoholic solution of guaiacum to the air until it has absorbed a sufficient quantity of oxygen to give it the property of turning green when placed in contact with iodide of potassium. On moistening the most minute quantity of pus with water, and pouring a drop or two of the test fluid over it, a clear blue color is produced.—*Medical and Surgical Reporter*.

THE HEAVIEST BRAIN ON RECORD.

Dr. James Morris, of London, reports the following case in the *British Medical Journal*:

On October 3rd, 1849, there was admitted into University College Hospital James Hursey, aged 38, bricklayer, a robust-looking man. Ruptured seventeen years before; he has left off his truss two or three years; now the rupture was down and could not be returned. It was right inguinal, small and tense, with no impulse on coughing. In the evening Mr. Arnot operated. The sac was opened; much serum, tinged with blood, ran from the abdomen; the omentum was adherent to the sac; the constricted bowel, of a dark mahogany color but shining surface, was returned. He did well at first, but died two days later. Erysipelas and pyæmia at that time prevailed in the hospital. Of ten successive cases of strangulated hernia operated on by several different operators, and treated afterwards on the most diverse principles, only one survived. In that case (Mr. Marshall's) the sac was not opened.

The *post mortem* examination of Hursey disclosed peritonitis, a serous cyst in the liver, some damage to the kidneys, old pleuritic

adhesions of the right side, recent lobular pneumonia (result of pyæmia), and some hypertrophy of the left ventricle of the heart. The weight of the brain, taken immediately on removal, exceeded sixty-seven ounces. This weighing was most carefully made, and was witnessed by several students. The brain was well proportioned; the convolutions were not flattened; though the surface was fairly moist, it only lost about one ounce weight after the usual dissection and draining for two hours. The specific gravity was not taken. The cerebellum and pons were separately weighed; of these I have not the figures, but there is no reason to suppose that they were disproportioned to the rest of the brain, as in the cholera case recorded by Dr. Parkes.

Hursey's height was about five feet nine inches and a half. There was the utmost difficulty in obtaining a satisfactory history of him. His wife and his landlady gave different accounts. It seemed that he was a native of Sussex (Dr. Parkes' case was an Irishman), and had left his village and changed his name on account of some poaching troubles; that he was not very sober, had a good memory, and was fond of politics. He could neither read nor write.

CARE IN OPERATING.—The following sensible remarks were made by Professor Humphrey, F. R. S., in a clinical lecture on lithotomy: "The great secret of success in operations, as in all efforts in life, is a painstaking and careful method of procedure, and in no operation is this more true than in lithotomy. In it the recovery of the patient depends, perhaps more than in any other, on the manner in which it is performed. Accordingly, when, thirty years ago, having just emerged from pupilage, I had the good fortune to be appointed surgeon to this hospital, where I knew I should be called upon to perform lithotomy, I was much impressed with the responsibility of the task, and set about seriously to consider the mode in which it could best be done; and I laid down for myself, a plan to which I have ever since closely adhered. A careful investigation of the subject, and an investigation of the different modes of operation practised by the most eminent men, convinced me that in this, as in most operations, the minimum of deep cutting was the safest course and gave the best results. Reading

confirmed what observation had shown me, and what reason had suggested, that not the brilliant, but the cautious operators were the most successful. I came to the conclusion that in deeply seated parts it is better to make nineteen or twenty cuts, amounting in the aggregate to nine-tenths of an inch, provided that is sufficient than one cut amounting to an inch. The extra tenth will now and then turn the scale against the patient, though the quicker proceeding may seem to tell in favour of the operator.—*British Medical Journal*.

MONOBROMIDE OF CAMPHOR AS A NERVINE.

Dr. William A. Hammond writes : (*New York Med. Jour.*)—
“My experience with the monobromide of camphor, though thus far limited, is eminently satisfactory. I have employed it in two cases of infantile convulsions due to the irritation of teething, with the effect in each instance of preventing the further occurrence of paroxysms which previously to its administration, had been very frequent. In each case a grain was given every hour, rubbed up with a little mucilage of acacia. Three doses were sufficient in one, and two in the other case. The children were aged respectively fifteen and eighteen months. In a very obstinate case of hysteria occurring in a young married lady, in the form of paroxysms of weeping and laughing, alternating with epileptiform and choreiform convulsions, I gave the monobromide of camphor in doses of four grains every hour. The influence was distinctly perceived after two doses were taken, but ten were necessary to break up the attack. This was a very favorable result, as all the previous seizures had lasted from five to eleven days, uninfluenced by medication or moral suasion. I have also employed it with excellent effect in several cases of headache occurring in women and young girls; and due to mental excitement and excessive study. One dose of four grains was generally sufficient to cut short the attack. In two cases, three doses at intervals of half an hour were necessary. In wakefulness, the result as it so generally is of cerebral hyperæmia, the monobromide of camphor appears to be greatly inferior to the bromide of calcium or even the other bromides. But it is apparently indicated in delirium tremens. I have not yet had the opportunity of trying it in this disease, but I should not hesitate in a case of the affection to administer it in doses of five grains every hour or half-hour, with the confident expectation that sedation and sleep would result. The monobromide of camphor may be given in the form of a pill, with conserve of roses as the excipient, or as a mixture with mucilage of gum arabic and syrup. The dose for adults ranges from two to five grains.—(*Med. Cosmos*.)

THE RECTILINEAR ÉCRASEUR.

The last lecture I heard from M. Nelaton, in Paris, was on the use of the *écraseur liniere* of Chasaignac for removal of hemorrhoidal tumors. He made two fatal objections to it:—1st, in internal

hemorrhoids it is sometimes followed by dangerous hemorrhage; 2nd, from the amount of tissue embraced it not unfrequently causes stricture of the anus. These objections I can fully endorse from my own observation.

About twelve months ago I contrived a *rectilinear écraseur*, which I think, properly employed, is free from the above objections, and fulfils all the indications better than any operation yet devised. It is almost entirely free from subsequent pain.

A glance at the above drawing will show that this instrument has two parallel blades coming together like a clamp. One blade has a narrow fenestra running its whole length of about three inches, and the other presents a rough edge (like a fine saw) so constructed as to pass into and fill up the fenestra when the clamp is closed. There is a shoulder projecting on each side of the blades, for the purpose of crushing more perfectly the tissues operated upon, a little beyond the thin edge of the blade.

This instrument does not completely sever the tissues (as does the *écraseur* of Chasaignac), but crushes them down to

a very attenuated pulp. If the hemorrhoid is within the sphincter, it is safest to tie a ligature in the sulcus made by the *écraseur* for



fear of some secondary hemorrhage—the tissue is so compressed that a very small pedicle is left for the ligature, and the vitality of the part being completely destroyed the *ligature causes no pain*, and the tumor drops off in a day or two. I cut away with scissors the part of the tumor outside of the ligature at the time of the operation.

I removed five internal hemorrhoids, at one sitting, from a patient, a few days ago, in the presence of Dr. Keyes, Castle, Yale and Dudley, and after the effect of the anæsthetic passed off, the patient never complained of pain. This is a result which is impossible after ligatures. The clamp and actual cautery used by some surgeons give good results, but much more troublesome.

Where the hemorrhoids are external, instead of using a ligature I clip them off with scissors as soon as the clamp is removed.

The principal advantages of this instrument are :—

1st. It is easily and rapidly applied, and requires much less time in its action than that of Chassaignac.

It removes in a *right line* the exact amount of tissue desired, and *is not* followed by pain.

This instrument is applicable to the tongue, cervix uteri, penis, tumors on cervix uteri or vagina, the vagina in operations for procidentia uteri, &c.—*Dr. Nott in the Med. Record.*

PHYSICIAN'S BILLS.

If there be any one thing in the medical profession demanding a change, it is the plan hitherto adopted, of sending bills for professional attendance only once, or perhaps twice, yearly.

There are many objections to this plan.

First. People frequently change their locations, and when sought, are therefore not to be found. Yet these same persons might have paid a small bill if promptly sent at the cessation of attendance.

Second. Bills running for a long time may, and generally do become large ; and many persons cannot pay *one* large bill as easily as the same bill divided into parts, and presented at different periods.

Third. Bills, if let run till they become large, are more apt to have deductions voluntarily made by the sender, at the time of delivery ; so that even if paid, less is realized by the doctor than if sent more frequently.

Fourth. After a long period has elapsed, people forget the length of time the physician has been in attendance, and may not feel the same satisfaction as if they had received their bills immediately, or soon after the services were rendered.

Fifth. In due course of time the gratitude is lost, and one great incentive to pay the bill is lost with it.

Sixth. By the course hitherto pursued attention must be too long bestowed before we can discover the true character of our debtors; and we really indirectly encourage those who make it a rule to go from doctor to doctor as soon as the bill becomes large or is presented.

Besides these reasons, we know that it is almost the universal practice now, in other kinds of business, to favor, and follow the method of sending statements frequently, and generally monthly. And why should not physicians observe in their business relations the rules pertaining to other business transactions?

In accordance with the above, we notice that the Sydenham Medical Corterie, of this city, has passed the following resolutions:

Resolved. 1st, That on every bill hereafter sent the following words be added: "*Bills rendered monthly.*"

Resolved, 2d, That the bills be thus often rendered, unless still in attendance on the patient."

We recommend this action to the notice of physicians, and if all would unite in this plan we think there would not be so much complaining among us about not collecting our dues.—*Medical and Surgical Reporter, Philadelphia.*

THE EXUDATION IN CROUP (*Steudener*).—In croup the mucus membrane is infiltrated with very numerous round cells, such as are found in all inflammations, and the false membrane when examined also proves to be richly supplied with similar cells. The cells in the false membrane are imbedded in a basis substance, which has in some cases a homogeneous, in others a somewhat fibrillated appearance. Now opinions differ as to the origin of the false membrane; some hold that the basis substance is formed by the conversion of the epithelial cells of the mucous membrane, the round cells owing their existence to an endogenous production within the epithelial cells. But the author is of opinion that croupous false membrane is

a true exudation, the basis substance being composed of fibrine just as that of the exudation on serous membranes in acute inflammation; and the round cells being amœboid cells which have wandered into the false membrane, as we find them to do in the inflamed peritoneum. His chief reasons for this view, are, that the false membrane is frequently produced after the mucous membrane has lost its epithelium, and he has seen no trace of the metamorphosis of the epithelium in the trachea, such as is described by some in the pharynx.—*Glasgow Medical Journal.*

ORIGIN OF PUS CORPUSCLES (*Hoffman*).—It seems now pretty well established that the statement formerly made by Virchow, that the connective tissue is the one source of all inflammatory cells, was too wide; and that pus corpuscles are, in part at least derived from the white blood corpuscles. The next step of course is to the opposite extreme from that of Virchow, namely, to assert that the connective tissue takes no part in the production of pus corpuscles, and this extreme Cohnheim was not slow to reach. The present paper aims at a solution of the question in an experimental manner. The plan of the author's experiments was, to charge the connective tissue of a living animal with vermillion-granules, and then to cause suppuration to be set up; and now if vermillion were found in the pus corpuscles it would be inferred that the latter arose from the connective tissue, and if not, that the contrary was the case. He found that when vermillion was injected into the vessels of a rabbit, it could be made to collect in considerable quantity within the connective tissue-cells of a given part, by irritating the part. Having thus got the connective tissue charged he excised a portion of the tissue, and so induced suppuration, and found that the pus corpuscles contained no vermillion-granules. He concludes, therefore, that the fixed connective tissue corpuscles do not take part in the formation of pus corpuscles, and that as Cohnheim asserts no source of pus corpuscles except the blood has yet been proved.—*Id.*

DR. WM. RICHARDSON'S TREATMENT OF DIABETES.—Dr. Richardson (*Am. Practitioner*) was himself attacked ten years ago with diabetes. After a prolonged trial of the most approved reme-

dies he was fortunate enough to hit upon a plan of treatment by which he has been cured, and by which also other diabetic patients have been much benefited. The essential features of this plan are the employment of regular and steady exercise, ablution of the skin daily with soap and water, the use of a bath, containing a tablespoonful of carbonate of soda, twice in the week ; exposure of the body as far as practicable to sunlight, and the continuous use of iron, which he uses in the form of tincture of the perchloride in four or five drop doses, with one or two drops of tincture nux vomica and eight or ten grains of chlorate of potash three times daily. He is an advocate of restricted diet ; but when the plan of treatment which he suggests is carried out fully he finds that a considerable amount of relaxation as regards food is not injurious. He regards the sudden adoption of a very restricted diet as likely to prove highly prejudicial. Dr. Richardson's present dietary is sufficiently liberal, and, besides meat, includes brown bread, with plenty of fresh butter, macaroni, and rice, potatoes sparingly, and occasionally a little dry fruit. Even a few glasses of champagne occasionally he does not find at all injurious.

HYGIENIC PHYSICIANS !!—[We observe in the Ontario Gazette a notice to the effect that application will be made to the legislature of Ontario at its next session for an Act to amend the "Ontario Medical Act," so as to allow physicians of the Hygienic School to register and participate in all the rights and privileges granted by said Act. We very much mistake the spirit of the legislature if they will entertain any such proposition. There can be no legitimate reasons given for the incorporation of one or two individuals into a separate body and giving them representation under the Medical Act,—might as well think of incorporating electricians, clairvoyants, midwives, *et hoc genus omne* who choose to call themselves by distinctive names. It is only an attempt to give a legal status to men who are not entitled to it either by education or professional ability, and which ought to be frowned down by every right minded public man. This so-called system has nothing in it, that is not known and practiced by every intelligent physician of the various schools recognized by the Ontario Medical Act and we cannot therefore see how it can be argued that in any way the public would be benefitted by such a movement.]—*Ed. Lancet.*

The Canada Lancet,

A Monthly Journal of Medical and Surgical Science,

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TORONTO, JANUARY 1, 1873.

MEETING OF THE MEDICAL STUDENTS OF TORONTO.

A meeting of the students of the three medical schools in this city was held on the 30th of November, to consider the working of the Ontario Medical Act, and to bring under the notice of the Council certain grievances of which they complain. The following resolutions were submitted to the meeting :

1st. "Whereas the medical students of Ontario, while recognising the benefits conferred on the medical profession generally, through the establishment of a Central Examining Board for the examination of students in medicine, feel that the Act has signally failed in its main object, viz : in securing protection to regularly licensed practitioners, inasmuch as the country is literally flooded with quacks, druggists, and others with questionable qualifications, who in open defiance of the presumed intention of the said Medical Act are openly practising medicine, surgery and midwifery, to the detriment of legally qualified practitioners. It is therefore resolved that the Medical Council of Ontario be requested to take action during the ensuing session of the Ontario Legislature, with a view to secure for the profession the protection so much desired." *Carried.*

2nd. "Whereas the said students of Ontario, considering that the fees charged by the College of Physicians and Surgeons of Ontario to candidates before that body for the license granted by them are exorbitant, request that the said fees be reduced to the sum of \$30, the said sum to include the matriculation fee. *Carried.*

3rd. "Whereas the said students of Ontario feeling the great inconvenience arising from the want of printed questions at previous examinations, demand that the questions hereafter prepared for candidates be handed to them in printed form, in accordance with the well understood custom of other universities." *Carried.*

4th. "That the rejected candidates at examinations should have the privilege of either withdrawing the amount usually refunded, or leaving it in the treasurer's hands, and in the event of going up for examination again no further fees be demanded from them." *Carried.*

5th. "That, in the event of the Medical Council of the College of Surgeons, &c., failing to comply with the above demands of the medical students now assembled, that we shall take into consideration the advisability of not presenting ourselves at any future examination of the said Council."

The last resolution not being considered explicit enough, the following was moved in amendment—

"That, providing the Medical Council entirely ignore the above resolutions, and take no steps to remove the grievances complained of, we will not present ourselves at any future examination till such grievances are remedied."—*Amendment Carried.*

The meeting was well attended and orderly throughout; the utmost unanimity prevailed, and the spirit of the resolutions showed that they were intensely in earnest. The chief ground of complaint seemed to be that they were charged too much for their licence, and that when obtained, it gave them no protection against unlicensed practitioners. They also complained that the support of the whole Council for meetings, examinations and elections, &c., fell upon them, and that the general profession did not contribute at present one iota to its support, although they derive equal benefits whatever these may be. It must be admitted that in these matters the students have just cause of complaint, but the peremptory manner in which they have worded these resolutions is not calculated to awaken the sympathy either of the Council or the profession on their behalf. The Council are doing all in their power to secure such amendments to the Medical Act, and such assistance from the Ontario Government as will meet the wishes of the Students, but until they shall have succeeded in this, it is utterly impossible for them to do more for the Students than they are doing. A similar meeting was held during the past month by the medical students of Kingston who are in entire accord with their brethren of Toronto. It was suggested by

the executive committee of the council, that the students should send a deputation to wait upon them and state their grievances. This was accordingly done and the meeting took place on the 20th ult. This deputation, consisting of one member from each of the schools of this city, and one from Kingston was kindly and courteously received by the chairman, Dr. Campbell, who assured them that the council were desirous of meeting their wishes as far as it lay in their power. The deputation then presented written copies of the resolutions adopted at their meetings, and said that they were prepared to make any explanation regarding them that the Council might wish. The chairman having read the resolutions, remarked that the students had the most hearty sympathy of the council, but that it was not in their power to redress every grievance. The council were not to blame, because the penal clauses were not sufficiently stringent, but it was their purpose to go before parliament this session, and get a Bill to amend the penal portion of the Act, and to obtain power to enforce the payment of the fine imposed. With regard to the fees for the licence, the necessities of the council required it, and if they did not receive assistance, either from the government or the profession, they could not grant the request. He then referred to the threats of the students to remain away, and said that in so doing they would injure themselves and not the council. In regard to the examination papers, he said the difficulty was that information regarding their contents, might leak out if sent to a printing office to be set up. If the printer were under their own eyes the thing might be done, but in no other way. The resolution in reference to the retaining or returning of fees to rejected candidates, had not been considered by the committee, and he would, therefore, say nothing about it at present. The chairman having repeated his assurances of good will, the deputation withdrew. The action of the Students, although a little unwise in some particulars, cannot possibly do any harm, but may rather be of service in strengthening the hands of the Council before the legislature, not only in their efforts to amend the Act, but also to obtain the much needed pecuniary assistance.

If they are successful in their efforts they will be enabled to fully meet the wishes of the students, and also do good service to the whole body of the profession in Ontario. The fees charged for the licence are, no doubt, double what they ought to be, and we cannot wonder at the remonstrance of the students regarding the matter.

Many of them, and many of the most deserving, cannot well afford this very heavy tax just at the conclusion of their very long course of study with its attendant expense. The Act has done good service in raising the standard of medical education, but it is manifestly unjust to tax the young men just entering the profession with the whole burden of its maintenance. The matter of printed examination papers might easily be adjusted, we think, by the examiner writing them in a good legible hand with chalk on a large blackboard and placing them in such a position that the candidates could read them from their seats. This is done in Colleges, and answers admirably, and we do not see any difficulty in the way of carrying it out effectually in an examination of this kind. The examiner might enter the room a quarter of an hour or twenty minutes before the appointed time and write them out carefully, so that no time would be lost after the candidates entered the room.

We would desire also in this connection to return once more to a matter referred to in the April and May numbers of the LANCET for 1872, viz: the propriety of obtaining an amendment to the Medical Act which will permit *Canadian graduates* who have taken out one or more additional degrees or diplomas in Britain, to become registered on payment of the ordinary registration fee. This, it will be seen, is intended only for the benefit of Canadian graduates who have, at considerable expense, availed themselves of the great advantages for clinical instruction afforded by the large hospitals of Great Britain, and who have shown themselves worthy of the honors of the institutions of the mother country. Every encouragement should be shown these young men, and we can see no reason why such an amendment should not be introduced. If the Council must insist upon their passing the usual examination, they might at least remit the ordinary fee for the licence.

ETHER *V.* CHLOROFORM.

The superiority of ether over chloroform in point of safety as an anæsthetic is at present attracting considerable attention, both in Europe and the United States, and the comparative merits of these two agents are again about to be tested in such a manner as will forever set at rest any doubt on this point. In America, ether has long been used and recognized, especially in New York and Boston,

as the safest anæsthetic, but from some cause or other it never seems to have come into general use in England. During the summer, an article appeared from Dr. Morgan, of Dublin, in the *Medical Press and Circular*, setting forth the superior advantages of ether over chloroform, and this was followed shortly after by another from Dr. Joy Jeffries, of Boston, who was on a visit to England, and who also took occasion to administer ether at several Hospitals in London during his stay there. This led to the effect of arousing the professional mind in England to a re-consideration of the question. From the statistics which have been collected in America, and also in England, it appears that but one death in 23,204 inhalations of ether can be presumed to have occurred, while from chloroform there have been one in 2,873—a mortality eight times greater than from ether. The principal objections formerly urged against the use of ether, are that it did not render the patient thoroughly insensible, was slow in its action, and did not produce complete muscular relaxation; but these objections have been entirely overcome by improvements in the mode of administering it. Nausea, vomiting, and headache may be avoided by the patient taking no supper, or but a light one, the evening previous to the operation, and absolutely *no food* the morning of the operation.

Ether was first used in England in 1846, but from imperfection in the mode of administering it, it never fully gained the confidence of surgeons. In the latter part of 1847, chloroform was brought forward by Sir James Simpson, and advocated by him with his remarkable energy and genius. It was then believed that the new anæsthetic was safer, more applicable, and much preferable to ether, and soon came into very general use, and has held its ground ever since—notwithstanding the many recorded fatal cases. A few European surgeons still cling to ether, so that we think that Dr. Joy Jeffries can hardly claim that he “re-introduced its administration into England.”

A remarkable advantage of ether over chloroform is that of its allowing of a speedy re-action, the patient being perfectly restored in a few minutes after the operation. The pulse rarely indicates any alteration, and no unpleasant symptoms follow its use. The public were becoming very naturally anxious at the occurrence of so many fatal cases from the use of chloroform, and it becomes the duty of the profession to re-consider the whole subject. In face of the great

mortality from chloroform, and of the almost deathless record of ether, we feel it our duty to urge upon the attention of the profession in Canada the claims that this agent has upon their confidence, and trust that it may have a fair and extended trial. We would be happy to hear from any who have had experience in the use of the different anæsthetics, and if they will kindly favor us with some notes on the subject we will gladly publish them for the benefit of the profession.

THE NEW YEAR.

With the present number we enter upon the new year, and we take great pleasure in wishing all our patrons the usual "compliments of the season." We feel very grateful to all our friends who have so kindly and liberally supported us in the past, and we most sincerely trust that we may have, not only a continuance of their respect and confidence, but also a renewal of their support and patronage. We think we may be excused for looking at the past progress and present standing of the CANADA LANCET with just feelings of pride. Commencing a little over two years ago, with a circulation of about 300, and confined to a few cities, towns and villages in Ontario, it has steadily and rapidly gained ground until it now circulates throughout every part of the Dominion, and also in several border states of the Union, and has reached a regular monthly circulation of 1500. With the encouragement we have given to contributors, by giving prominence to original communications, we have succeeded in enlisting the efforts of medical men in all parts of the Dominion, and the general improvement in this respect has been apparent during the past year, and we would take this opportunity of publicly thanking our many contributors for the able assistance they have given us in enriching our columns, from time to time, with their valuable experience. That many of the articles which appeared in the columns of the LANCET during the past year were considered of value, we have only to mention that they have been frequently copied into other journals in Europe and the United States. This is a very gratifying circumstance, and one which we, as Canadians, may justly feel proud of, however much we may at times feel disposed to criticise unfavorably the efforts of our

confreres to give publicity to their views. We know too, that we have published some papers, about which the less said the better, but, we are not sure, after all, but they may have done some good, on the same principle that a man may learn a lesson from some misadventure of his own, or from the mistakes of others. In the course of a year or two we will, no doubt, have abundant material coming in every month, from which we will be able to select the best and most suitable articles for a medical journal. At present we feel more like encouraging every one, who will, to write for our columns, and every article deemed worthy will find a place in the LANCET. During the last month or two we have received a large amount of original matter, some of which has been unavoidably crowded out in the present month, but will appear in our next issue. As heretofore, we will spare neither pains nor expense to maintain for the LANCET the prominent position it has already attained, and shall devote our energies more and more assiduously to the work we have in hand. We will increase the size of the journal,* from time to time, to meet the demands of our contributors, and shall endeavor to make it a faithful exponent of the progress of medical and surgical science in the Dominion. We conclude by again thanking our friends for their kind and liberal support, and wishing them all a "Happy New Year."

BREACH OF PROFESSIONAL ETIQUETTE.

A most glaring instance of want of professional courtesy on the part of Dr. Skinner, of Waterdown, towards his *confrere*, Dr. Philp, of the same place, has been lately brought under our notice. It is as follows:—A patient having died of scarlet-fever under the care of Dr. Philp, a report was circulated that it was from small-pox, (a case having occurred in the neighborhood a short time before), and that Dr. Philp was endeavoring to conceal the truth in the matter. Dr. Skinner, who had not seen the patient, was asked by some of his friends, who were adverse to the doctor in attendance, to see the body. He complied with their request, and visited the body 16 hours after death and in the absence of the medical attendant. Not

* The present number contains 72 pages.

content with this, he inspected the body and stated as his opinion that the patient died from *Diphtheria* and not from scarlet-fever, &c. Dr. Philp, on hearing of this action of his medical *confrere*, called upon him to enquire upon what ground he based his opinion. He stated in reply that after death from scarlet-fever he expected to find the rash *well* out and presenting a *roughness* to the touch, and as these were wanting and as some specks had been observed on the throat he attributed death to *Diphtheria*! Dr. Skinner's want of courtesy can only be equalled by his ignorance, and any medical man who could be guilty of such an act as the above should be treated with the utmost contempt and scorn.

HOSPITAL APPOINTMENT.

Dr. Graham, of Toronto, has been appointed on the acting staff of the Toronto General Hospital, in the room of Dr. Berryman, resigned. We congratulate our young and aspiring *confrere* on his appointment to this office, but, at the same time, we cannot help remarking the unfairness of appointing another medical man from the Toronto School of Medicine, while each of the other two Medical Schools in this city have but two on the acting staff. We are ever desirous of fair play and even-handed justice in all matters, whether of a public or a private character, and we cannot but express our surprise at the action of the Trustees in reference to this appointment. While pretending to repudiate the claims of the schools altogether in these appointments, and to choose men for these positions solely on account of their practical experience and fitness for the office, and in the face of all this to appoint a practitioner of one year's standing and an *attache* of the Toronto School of Medicine, is somewhat mysterious. It may have been from personal considerations. If so, all we have to say is, that men who will allow personal considerations to bias them in the dispensation of a public trust are not fit for the positions they occupy, and the sooner they are replaced the better. We intend to represent this matter in the proper quarter and see if some remedy cannot be secured, or some better means of determining such appointments arrived at.

NOTES AND COMMENTS.

EXTIRPATION OF THE KIDNEY.—Dr. Peters, of St. Luke's Hospital, (*New York Medical Journal*, Nov. 2,) reports a case in which he performed the above operation. The patient was about 36 years of age, and had been suffering for a long time from disease of the kidney, passing at times small quantities of pus, amounting in 24 hours to about 4 ounces. There was constant sense of weight in the right lumbar region, with pain shooting down into the pelvic region. On physical examination, a large tumor was found occupying the region of the right kidney, supposed to be the kidney itself. It measured about 4 inches transversely, and extended from the last rib to the ilium, and deep fluctuation could be detected in what appeared to be the region of the pelvis. An exploratory trocar attached to Dieulafoy's aspirateur was introduced about 3 inches from the spine in presence of Dr. Van Buren, and about 3 ounces of clear pus flowed into the exhausted receiver. From the symptoms, purulent discharge and aggravated pain at times—the presence of a pelvic calculus was diagnosed, and an operation for its removal and possible extirpation of the kidney determined upon.

An incision was made from the lower border of the twelfth rib to the crest of the ilium, parallel to, and three inches from the spine. The kidney was reached beneath the outer border of the quadratus lumborum, but no calculus was found. The kidney was found very much diseased, and it was thought best to remove it, which was accordingly done, and the vessels ligated. The patient died on the third day. Another case is reported in the *British Medical Journal*, May 18th, in which Dr. Durham, of Guy's Hospital, removed the right kidney from a woman. This case also terminated fatally.

CLINICAL INSTRUCTION.—The *Canada Medical Record* says :—“Within the last few years, but especially this fall, there has been very loud murmuring and much dissatisfaction expressed at the facilities afforded at the Montreal General Hospital for the purpose of clinical instruction, and suggests an increase in the staff of attending physicians.” There are eight acting members on the staff, and two of them attend for three months in rotation. There will therefore be upwards of 50 students following each physician through the wards—a great number of whom will be utterly unable either to hear or see what is going on at the bedside of the patient. The present arrangement imperatively calls for improvement.

PATENT MEDICINE VENDORS.—An action for libel was lately brought against the *American Agriculturist* by a Dr. Ryan, a patent medicine vendor. Judge Brady, of New York, before whom the case was tried, gave the following opinion :—(1.) “A medicine that claims to be an antidote, but is not, is calculated to deceive, and is a fraud.” (2.) “The seller of a drug or medicine, who vends it with an unqualified statement of its efficiency, must take the consequences if his representations be untrue.” (3.) “That men should be held to a strict accountability who attempt to practice on the credulity of the afflicted.”

We fully concur in this interpretation of the law, that any man who buys a nostrum advertised to cure a certain disease, and is made worse, or is not cured, can bring suit and recover damages from the vendor of said nostrum. We trust that those injured or not cured will apply for damages in such numbers as to frighten these unprincipled men into propriety.

BLEACHED TINCTURE OF IODINE.—Sulphite of soda will discolor iodine without diminishing, but rather increasing its effect. The *Medical Press and Circular* gives a formula for the combination, viz: Tinc. iodine, glycerine, pure aa ʒj., soda sulphitis, ʒj., M. Rub the sulphite to a powder, in a small mortar, and add the glycerine gradually; then pour in the tincture and triturate gently, until a solution is affected and the mixture assumes an amber color.

LITHOTOMY IN CHILDREN.—On the 13th of November, Dr. Kingston, of Montreal, (*Medical Record*) operated upon a child five years of age for congenital calculus of the bladder. The case did well. The stone was hard and was about the size of the shell of a pea-nut. It was extracted by means of a thin scoop of horn, so that there was no undue dilatation of the wound, a point of some importance.

APPOINTMENT OF CORONERS.—John Barnhart, Esq., M.D., of Owen Sound, to be an Associate Coroner for the County of Grey.

Edward Oliver, Esq., M.D., of Mooretown, to be an Associate Coroner for the County of Lambton.

Wm. Coburn, Esq., M.D., of Oshawa, to be an Associate Coroner for the County of Ontario.

Christopher Knowlson, Esq., M.D., of Omemee, to be an Associate Coroner for the County of Victoria.

James Taylor, Esq., M.D., of Tara, to be an Associate Coroner for the County of Bruce.

NEW OPERATION FOR COLORING CORNEAL OPACITIES.—Dr. R. J. Levis (*Philadelphia Medical Times*) describes a method by which corneal opacities may be colored so as to resemble the natural color of the iris. It is somewhat similar to what is called, when applied to the skin, *tattooing*. The opaque spots are concealed by indelibly tinting, so that if central they shall show the darkness of the pupil, or if peripheral, the color of the underlying iris may be most deceptively imitated. It was first introduced by the late Dr. Wecker, of Paris. The instrument used consists of five or six fine sewing needles firmly bound together. The coloring material is then applied over the surface of the opaque spot, and the needle points made to penetrate repeatedly and rapidly in various directions, until the whole opacity is gone over in this way. If sufficient color is not given at the first operation, it may be repeated. The coloring matter consists of the ordinary artist's colors, and Indian ink, which is a mixture of lamp-black and gelatin.

SIMPLE TREATMENT OF SCARLET FEVER.—Dr. Egbert recommends (*Trans. Pennsylvania Medical Society*) the use of the following mixture in the treatment of scarlet fever:—R. Acid muriatic, fʒj; Syr. simplicis, fʒij; Potass. chlor., ʒiij; Aquæ rosæ, fʒiv M. Sig. Half a tablespoonful every two hours. This dose is intended for a child six years of age. When there is much restlessness he combines a little paregoric with the above. He does not use gargles or caustic to the throat or fauces. Scarlet fever does not, according to his idea, consist of different varieties, but is the same disease in all places and circumstances, modified by atmospheric, hygienic and other influences. He has treated upwards of 270 cases in this way, and has only had *one* death.

HÆMOPTYSIS.—The atomized vapor of a saturated solution of gallic acid thrown directly into the nose and mouth, is recommended by Dr Holden, in the *Medical Record*, N. Y. He has repeatedly found the most gratifying results follow at once, even in cases of profuse hemorrhage, when the blood was streaming from the mouth with every expiration.

NIGHT SWEATS.—Sidney Ringer, (*Practitioner*), states that belladonna has a decided effect in checking anomalous cases of habitual sweating; other observers have found atropine in 1-60 grain doses, two or three times a day, to exercise some control over the profuse sweats of advanced phthisis when other remedies had failed.

MARION SIMS ON OVARIOTOMY.—The *New York Medical Journal* contains a long and interesting article on ovariectomy, by Dr. Sims, in which he says that he is not yet satisfied with the results in this operation. The death-rate is still too high, and while the majority of operators are quibbling about the form of ligature or clamp—the great cause of death, (septicæmia,) is entirely overlooked. He proposes to puncture the *cul-de-sac* of the vagina behind the cervix uteri, and to pass a tube of some sort into the peritoneal cavity, to drain off any effusion that may take place in said cavity. This he recommends to be done as the final part of the operation. It cannot possibly do the least harm, and may possibly be the means of saving life. If no discharge takes place it can be removed per vaginum in a few days. In regard to the clamp, he thinks it has seen its best days. He prefers silver wire ligature to any thing else as a rule.

NEW TREATMENT OF STRICTURE WITH RETENTION.—In the *British Medical Journal* for November, Dr. Jordan, Surgeon to the Queen's Hospital, Birmingham, describes a new mode of treating retention of urine and impassable stricture. It consists in making an opening from the rectum into the membranous portion of the urethra, in front of the prostate, and passing the catheter from behind forwards, the stricture generally yielding more readily in that direction, and all false passages avoided. The ivory end is then cut off smoothly and guided into the bladder with the finger. He infinitely prefers this to opening the bladder behind the prostate gland, as being less dangerous, and a means of relieving both the retention and stricture at the same time. In old strictures the membranous portion of the urethra is very much distended, and is therefore easily opened. The opening may be made by means of an ordinary curved bistoury, guided by the finger.

HONORS TO CANADIANS.—C. W. Marlatt, Esq., M.B., Graduate of Trinity College Medical School (72), has passed a highly creditable examination before the Royal College of Surgeons, Eng., and was admitted a member of that body.

Alexander Scott, Esq., M.B., Toronto University, has also succeeded in obtaining the L.R.C.P., and L.R.C.S., Ed.

A NEW ANTIPERIODIC.—The *Laurus Nobilis* is very highly spoken of by M. Doran, (*Comptes Rendus*) in the treatment of quotidian and tertian intermittents. Cases in which quinine had failed yielded readily to this remedy.

PUNCTURE OF STRANGULATED HERNIA.—Dr. Chauveau (*Four. nal de Medecine*) records two cases in which, by capillary puncture and aspiration of the gas and fluid contents of the bowel, strangulated herniæ were rendered reducible.

ELECTRICITY IN FACIAL PARALYSIS.—Dr. Finlayson, in the (*Glasgow Medical Journal*), reports four cases of facial paralysis, brought on by cold, glandular affections of the neck, &c., treated successfully by electricity after other means had failed. The electrical treatment consisted chiefly in faradisation of the paralyzed muscles.

“OPEN AIR” TREATMENT OF HOOPING COUGH.—This plan of treatment which consists in keeping the little patient as much as possible out of doors in the open air, is strongly advocated by Dr. McLean, of Glasgow, (*Glasgow Medical Journal*). He does not consider this plan of treatment as a specific in every case of whooping cough; but it is one which, in the hands of a judicious physician, can be made of immense utility, and even in certain complications can be adopted with safety.

BROMIDE OF POTASSIUM IN ACUTE HYDROCEPHALUS.—The use of this remedy in the above disease has been brought prominently forward by Dr. Brunton, Fel. Obst. Society, London, (Ib). The *rationale* of the treatment is that it diminishes the amount of blood going to the brain. It is on this principle that the bromide is said to produce sleep. He gives several cases in which this treatment has been successful. He administered it in two grain doses every hour to a child a little over a year old. He says, “reduce the blood supply, stop effusion, absorb the products of that effusion, tone the system, give it strength, and the result will be satisfactory.”

EMPHYEMA TREATED BY PNEUMATIC ASPIRATION.—Dr. Lilly (*Glasgow Medical Journal*) reports a case in which eight gallons in all were removed from the chest by means of Dieulafoy's aspirator. The needle was at first introduced about once a week, but as so little pain attended the operation, and as it was thought desirable to keep the cavity empty, it was introduced every day for about six weeks. The patient did well. The use of this instrument does away entirely with the possibility of the entrance of air to the chest, and causes very little pain or irritation, both of which are important factors in the successful treatment of this affection.

At his residence, Plattsville, on Friday morning, 20th December, JAMES BURLEY ROUNDS, Esq., M.D., aged 47 years and eight days. Deceased was for 19 years a much esteemed and highly successful physician in the Township of Blenheim, where he enjoyed a large and lucrative practice. His death is very widely and deeply lamented.

At Fenelon Falls, on Saturday, the 21st inst., JAMES FITZGERALD, M.D.C.M., aged twenty-eight years, son-in-law of Mr. James Ramsay, of this city.

REPORTS OF SOCIETIES.

CANADIAN INSTITUTE, MEDICAL SECTION, TORONTO.

TORONTO, Friday, Dec. 20, 1872.

The Chairman, Dr. W. W. Ogden, called the meeting to order, and the minutes of the previous meeting were read and confirmed.

The nomination of officers for the ensuing year was next taken up, and the following gentlemen were appointed:—Dr. C. B. Hall, Chairman; Dr. Reeve, Secretary; Drs. Roseburgh, Williams and Archibald, Members of Committee.

The subject of a revised tariff of fees was then brought under discussion, the attention of the section being drawn to those in force in Montreal. A Committee, consisting of Drs. Oldright, Coleman and Reeve, was appointed to take the matter into consideration and report at the next meeting. It was suggested that they should see as many members of the profession in the city as possible, with a view of ascertaining their opinions in the matter, so as to secure uniformity of action.

At the close of the meeting Dr. Roseburgh exhibited the workings of a substitute for the stomach pump on the Syphon principle. This is somewhat similar to the one proposed by Dr. Hodgen, Prof. of Anatomy, St. Louis Medical College. (See CANADA LANCET, Vol. iii., page 9.) It consists of a stomach tube which is passed down the œsophagus and the extremity introduced into a vessel containing water, if it is desired to wash out the stomach. By elevating the vessel above the level of the stomach the water flows in, and on lowering the vessel below the level of the stomach it flows out again. In this way the stomach can be thoroughly washed out, and any foreign substances it may contain be as completely and effectually removed as by the use of the stomach pump.

EXECUTIVE COMMITTEE COLL. PHYS. AND SURGEONS, ONT.

A meeting of the Executive Committee of the Council of the College of Physicians and Surgeons, Ontario, was held on the 20th ult. In the absence, through illness, of the President of the Council, who is Chairman of the Executive Committee, the Vice-President, Dr. Campbell, took the chair. They had under discussion the resolutions passed by the medical students of Toronto and Kingston, and they also received the deputation appointed by them to wait upon the Council. Reference to this matter will be found in another column.

After routine matters were disposed of, the consideration of the amendments to the Ontario Medical Act was entered upon. This occupied their attention during the rest of the session, which lasted only one day.

A cordial vote of thanks was passed to the Chairman, Dr. Campbell, for his efforts in securing the rooms in the School of Technology in which they met; through his efforts these rooms have also been furnished and fitted up complete, for the purposes of the Registrar, at the expense of the Ontario Government.

The draft of amendments has not been sufficiently advanced to permit our publishing it in full, but we apprehend it will embrace the following clauses:—

1st. To legalize the acts of the Executive Committee of the Council acting in the interim.

2nd. To amend the penal clause and make it more effective.

3rd. To make a small annual assessment on the profession.

4th. To amend the election clause and make it more simple and effective.

5th. To give power to the Council to try cases of controverted elections.

6th. To give power to acquire real property.

7th. To amend clause 2, section xxxiii, of the present act relating to matriculation.

8th. To secure justice to medical men who act as witnesses in courts of law.

9th. To facilitate the changing from one school to another, Homœopathic to "general," and *vice versa*—after an examination—by any who may choose so to do!!

BOOKS AND PAMPHLETS RECEIVED.

- REPORT ON THE PROGRESS OF OTOLOGY, by Clarence J. Blake, M.D.
Boston: A. Mudge & Sons, Printers.
- ANNUAL REPORT OF THE N. Y. STATE LUNATIC ASYLUM, for 1871.
Albany: The Argus Co., Printers.
- ANNUAL REPORT OF THE SURGEONS OF THE MASS. CHARITABLE
EYE AND EAR INFIRMARY, 1872. Boston: James Campbell,
Publisher.
- AN EXAMINATION OF PROF. REESE'S "REVIEW OF THE TRIAL OF,
MRS. WHARTON FOR THE MURDER OF GEN. KETCHUM," by
P. C. Williams, M.D. Baltimore: Turnbull Bros.
- AN ADDRESS TO THE NURSES OF THE TORONTO GENERAL HOSPITAL,
by Jno. McDonald, Chairman of the Board of Trustees.
Toronto: Copp, Clark & Co.

TO SUBSCRIBERS.—To all those of our subscribers who have paid up their subscriptions promptly and cheerfully (happily the majority) we return our warmest and most sincere thanks, and those who, from some cause or other, may have overlooked our claims will, we hope, send in their remittances without delay, and thus help to gladden the hearts of the printers at this season of the year. From press of business, and many other things, subscribers are very apt to overlook these matters, and some have advised us to enclose a bill, or reminder of some kind, in the journal,—a privilege also allowed by the postal authorities. This we have done with the best intention, and with good results; but we regret to say, that this procedure has given offence to some very sensitive persons. This we feel very sorry for; we would not wish to offend even the most capricious, and all we wish to say to such is, pay up your subscription and we will promise not to enclose any more reminders—for a year. After this disclaimer from us we hope that those long in arrears will not take any offence at the bills enclosed in the present or any subsequent number.

Law Respecting Periodicals, Newspapers, &c.

1. Subscribers who do not give express notice to the contrary, are considered as wishing to continue their subscriptions.
2. If subscribers order the discontinuance of their periodicals or newspapers, the publisher or publishers may continue to send them until all arrears are paid up; and subscribers are held responsible for all numbers sent.
3. If subscribers neglect or refuse to take the periodicals or newspapers from the office to which they are directed, they are held responsible till they have settled their bills. Sending numbers back, or leaving them in the office, is not such notice of discontinuance as the law requires.
4. If subscribers remove to other places without informing the publisher, and their periodicals or newspapers are sent to the former directions, they are held responsible.

THE
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Original Communications.

THE INSANITY PLEA.

BY DR. D. CLARK, PRINCETON, ONT.

When a murder is committed now-a-days, either by man of woman, with or without provocation, it has become safe and fashionable, to put in the plea of insanity, in extenuation of crime, and generally with good effect. Experts are found, who are ready to prostitute their high vocation for gain, or medical men pretend to define in the witness-box, what insanity is, but are equally ignorant of what it is *not*. Dr. Allen, U.S., recently told the truth, when he said in evidence, "that lawyers made fools of themselves in trying to make asses of the doctors," when witnesses in such cases. The fact is, that no mortal man can correctly define and recognize insanity in its lowest forms, and in its mildest types, and not involve in his definition a diagnosis of the idiosyncrasies of the greater portion of the human family. The legacy of the great Satirist had truth, as well as irony, in its provisions, when he left his all to build lunatic asylums for his country, as its greatest need. Is eccentricity the first step in the *descensus Averni*? Then, who but a "good-

less illless," is free from it? Is lack of *common sense* a proof of insanity? Let philosophy define what common sense is, and tell what per centage of the population possess it. If it can be defined by jurists, as being "a due regard for the usual institutions and habits of mankind," then those, who *ab initio* introduce institutions, and contract habits, are *non compos mentis*. Habit may make one idea so dominant as to be considered the sole end of life. To such an extent is this evident, in every neighbourhood, that feelings, emotions, desires, passions, and aptitudes, absolutely govern the subject, and make him sacrifice his own interests, and those of his dearest relations and friends. These may be right or wrong, but, to such, of absorbing interest, and hence become monomania. Has it not been an epidemic since about the time Eden bloomed? It may be a patent churn *perfectionism*, or a perpetual motion, Will o' the wisp, or a Figuiet theory, to which all other hypotheses must bow, that the sun has for its fuel the souls of the good: or any other hobby which such men straddle, and John Gilpin like, ride it far enough—too far—and back again. With such, money goes—property vanishes—health is sacrificed—families are plunged into beggary—and all, because of eccentricity, oddity, peculiarity, or, shall I say, insanity? This state may only be an exalted condition of the understanding, and quite normal, without the balance wheel of tact to regulate the power. Even the moral nature becomes subservient to this bias of intellection, and in a wild-goose chase incites and excites to crime. Jealousy will murder without real cause, for suspicion becomes "confirmation strong as Holy Writ." Envy will defame to the death, without compunction. Greed will cheat and rob, then smack the lips over its fiendish exploits. Impulse will commit all the crimes in the calendar; then with a demure face, go into the dock, and potently plead innocence, because of insanity. Dr. Bolus, Dr. Scalpel, or Dr. Lancet is called to explain, if such is the case. They give all the phases of this so-called abnormal state, in technical language to a jury, and rascals by the score go unwhipped by justice, because they have been proved to be afflicted with dementia, monomania, insane impulse, or any other fraction of the unit, insanity. This popular plea has become a standing nuisance, and medical men, not accustomed to perceive daily the multifarious manifestations of unsoundness of mind, are not fit judges in the witness box. Sane, clever Drs. could be found in scores, in Canada,

and in this year of grace 1873, who "without fee, or hope of reward" conscientiously believe, and could give reasons, weighty and potent in theory, that a number of *e.g.*, our public men are afflicted with monomania, and hence *lawfully* irresponsible creatures, objects of pity. This state is easily simulated. A few months ago, a clever reporter of the New York *Tribune* feigned insanity. He went to a hotel—called for 'hippopotamus soup'—wanted to take the first express train to the moon—had a notion that suicide would be pleasant by jumping out of a third story window—frightened a medical student, who was sent to watch him and note symptoms and signs, nearly out of his senses—made a stout Hibernian servant cry fire, to awaken at midnight the hundreds of lodgers in the hotel for fear of his life—stuffed the pillow in his mouth to prevent himself from laughing, was thought to be in a paroxysm of rage—was patted on the head by fair hands, and soothed to quietude by soft words. He got his pulse up to 140 by indulging in bursts of fury, and deceived two clever physicians, and one "stupid," all of whom made affidavits that he was insane. The Dr. of Bloomingdale Asylum noted him as a dangerous character, and put him among yelling maniacs for days, yet all was "a delusion and a snare." Had this man contemplated and executed murder, immediately before, or during this time, using this madness as a cloak, these medical gentlemen could have given evidence as to his insanity, sufficiently strong to clear him. This matter has become serious, and among our neighbours a plague spot in jurisprudence. Mrs. Fair shoots her paramour through jealousy, and is proved to have been impelled by insane impulse. Stokes puts a bullet through Fisk from blind hate, and the same plea is urged. Richardson is shot in the N. Y. *Tribune* office, by a maddened and divorced husband, and the insane defence frees him from a just retribution. Dozens of such instances might be cited. One hundred and ten murderers and manslaughterers have been imprisoned in New York during the last eighteen months, and of these, 40 per cent have entered, or are entering a plea of *non compos mentis*. How can medical evidence rebut such an argument, or arrive at a solution of the complex problem, seeing that human skill and experience know so little of its secret workings? The law virtually puts doctors on a par with any other observers, and ironically says in substance "while great respect should be paid to experts, their evi-

dence is entitled to *no more* weight than any other body of men, when speaking of subjects which lie within the range of common observation and experience." So do the stars and much of the wonderful phenomena of nature "lie within the range of common observation and in many instances, experience also, but by parity of reasoning a respectful hearing should only be given to Galileo, Kepler, Newton, Lyell, Agassiz, and Tyndall." Such is law but can it be dignified by the name of being common sense?

The student of this field of nature must be put on a par with the *ignobile vulgus*. The fact is, there is more aberration of mind, than is "dreamed of in our philosophy." A good many kinds of it, which carry in every act responsibility, and consequently liability to adequate punishment, are classified to shield crime. Some jurists avoid this, but juries do not. The lawyers say, the prisoner is crazy. The judge splits hairs about it, and "muddles us so," quoth the foreman. "Not guilty, my lord." It is certain, that if justice is to be meted out, either we must have a new and restricted definition of this *brainal*, or mental disease, or certain classes of it must include moral guilt. Reason may be blunted and warped, but not lost, and thus deceives the conscience, as to right and wrong. Herein I differ (as will be seen hereafter) from the expressed opinions of all the medical jurists I have read on the subject. Conscience is *only* a judge to hear the evidence reason presents, and pronounces a verdict according to such affirmations. If the evidence should be false, then conscience will give a wrong decision, and if followed, *might* involve moral guilt; consequently, to say, that we are in the path of rectitude and sanity if we follow the dictates of conscience, is a fatal error. It gives decisions according to the evidence, but cannot discriminate as to its credibility; that is the work of judgment, and it only. If this definition of the function of conscience be correct, then a proper sense of right and wrong includes rational and true cognition of the objects or subjects of contemplation. In other words, the logical powers must be deficient in unsoundness of mind, pure and simple. This is always perceived in the subjects of lunacy. The premises may be false, but taking them for granted, the conclusion may be right. Or, the syllogism may be correct in the major or minor premises, but the deduction erroneous. Such self-delusion is common, and indicates sound reasoning powers, but unsound judgment, which leads conscience

astray, and asks and procures a wrong mental verdict. Thus in sanity reduces itself to *error of judgment* in violation of natural law or order. To break unjust human law may be a sane act, and although the converse may not be true, yet all proper and beneficial human law must be in harmony with the eternal fitness of things. Moral depravity may blunt conscience, or reiterated acts of wickedness may almost annihilate its operations; but, the more reason is used, the more acute and powerful it becomes. Its abuse is often the *occasion*, if not the cause of aberration of mind. Taylor says: "A lunatic may have the power of *distinguishing* right from wrong, but he has not the power of *choosing* right from wrong." An error lurks here, for whatever he *chooses* to do, is a volition, and of necessity *free*, because performed. The *choice* is a *free* act, or it could not be done. He is not sufficiently explicit in distinguishing between the natural bias of man to wickedness—his acquired tendency to vice—and his *intellectual* discrimination, (or *power* to distinguish.) I am well aware that jurists hold, in a modified form, some of the views I have enunciated, in regard to culpable crime, in certain insane acts. Dr. Carpenter's theory—*Impulsive Emotional Insanity*—is now generally accepted, and the plea criminally used. Sudden incentives to crime are held by such, to involve a certain want of moral wrong. The criminal may be able to distinguish between right and wrong. He knows his act is a violation of moral, as well as criminal law; and in the face of this light, he is impelled to diabolical deeds, it may be even without motives. The dominant idea is said to prevail *against* the will. Even Blackstone is led into such loose expressions as those, and speaks of no human action being criminal, in a legal sense, when there is evidence of *want* of will; and this volition is overruled by inward criminal desire, or outward alien force. It is, of course, rank nonsense to say that any mental act can be done without the consent of the will. The fact that it is done, is evidence of consent. Physical agency must not be confounded with volition, for the hand of a comatose man may be used as an instrument to do murder, or sign a will, and he, as a living, thinking being, "have no lot nor part in the matter." When the passions, desires, or emotions, move the Ego to perpetrate crime, it is done always with the *consent* of the will, else it never could be done by him. It is wrong, then, to exculpate on the plea that a man is "convinced against his will," to act, and therefore there should be a

verdict of acquittal, or, on this ground, a mitigation of punishment. The *impulse* is not insanity, or, if so, then is such mental alienation normal, among mankind. This emotional *vis a tergo* may come involuntarily, like any other forbidden thought, but all men with reason in full tonicity can ostracise it immediately. If not, such are unsound, independently, of all such exciting impulse. The "moral self-control" spoken of, as a cure for insanity, resolves itself into a determination of will. Moral considerations may not be factors at all. Selfish or self-love motives do determine acts more potently in a majority of cases, than any sense of right or wrong and *apparent* spontaneity of mind may only be an incited change of modes of life, from an innate desire of self-preservation or other equally potent motives. In the eye of the law a drunkard, who commits murder, or any other heinous crime, while in the mania of intoxication, is held to be as guilty, as if perpetrated when sober, because his deplorable condition had been brought about by voluntary acts: yet, the man who harbors and nurses unholy passion, until it becomes a second nature, and consequent upon this state, commits a foul deed, in wild delirium, although the initiatory impulses were, so called free volitions, is absolved from guilt, on testimony of aberration of mind. It is often, only intermittently, that the latent fiend is raised to do devilish and "fantastic tricks." External circumstances, or internal excitement may be the *occasion*—the sparks to the gunpowder—of burst of fury, during which deeds of evil are done. A few years ago, I had a patient aged 14 years, whose skull had been crushed in by a kick from a shod horse. Nine pieces of bone were extracted. One of them had been driven over an inch obliquely into the substance of the brain. The membranes were ruptured, and nearly an ounce of the lacerated brain oozed out, or was cut away. He recovered and went to school, as formerly. Here were "bumps" whose internal economy was sadly interfered with, and their rivals on the opposite side, or on the same side, had a fine chance of domination, but sensibly did not take advantage of suffering colleagues, and co-workers, believing in a duality of interests. The same school-mistress taught him before the accident, and after it. The psychological wonder in the case, follows. There was still a hollow, where the brain had been removed, showing deficiency of cortical substance; yet, his memory—arithmetical powers—logical expertness—temper and acuteness of observation, were, for about

two years, as good as ever. Suddenly, after this, a change "came over the spirit of his dreams." The cavity had partially filled, but whether by *bona fide* brain, or adventitious deposit, deponent saith not. Irritability in every act set in. Paroxysms of apparently ungovernable rage came on occasionally. Friend and foe were then alike to him, Destruction was then his delight, and everything "*come-atable*" was attacked with vigor, and if possible torn to pieces. These fits of passion only lasted for a few minutes, and months might elapse ere they recurred. After they passed away he was as quiet as usual. Had this fury been persistent, and continuous, it might justly be inferred that some *permanent* change had taken place in the brain after the accident, but their intermittent nature precludes such a hypothesis. The scalpel and microscope may discover no change of structure, but there must be molecular change—possibly cumulative—to explain the phenomena. Unless a change takes place, or he becomes incarcerated, he may become a man-slayer, in his almost demoniac demonstrations. If in a strange country, as he is at present, and his previous history not known except from his own statements, a respectable jury will condemn him, and some M.D. will pronounce him a responsible person, and fit for the gallows. Possibly he is, for his father believed in "a rod for the fool's back," and wholesome dread *checked* his destructive propensities. J. M., an American officer, had bravely done his duty through all the battles of the Wilderness, and had been wounded at Coal Harbour. In the advance on Hatcher's Run, on Oct. 27th, 1864, a spent cannon-ball passed near his head, and, from the concussion of air, he was knocked over, but it did not touch him. In an instant he became a coward. It was deplorable to see the hitherto brave man skulk away to camp, without permission, with the roar of battle in his ears, and his battalion with its face to the foe. He smuggled himself on board a transport, and went home. I am told by his friends, that he has moody seasons. He says, that at times, he *feels* like doing some desperate act, but can control his impulse by mental effort. Some day the bridle may not be on Mazeppa, and a new horror may be enacted. The theorists of *insane impulse* would say that at such moments, when a tragedy takes place, insanity was present. Neither seem to have physical disease, but through the brain the equilibrium of the mind has been disturbed. Taylor says: "The great feature of insanity is *change of character*. Here it is, and with it full respon-

sibility. There is no more trace of abnormal mental action, than in other mischievous and cowardly, but sound members of society; and these impulses to evil are common to all. It is only a question of degree, and Taylor's definition would cover all such rational subjects. Is it correct, then, for medical witnesses to have a fancied standard of insanity, and judge all cases by it? Judge Warden, in his "Forensic view of man and law," holds it is, and lays down three dicta on the point—" (1.) An ideal standard of soundness, bodily and mental is desirable. (2.) It is conceivable. (3.) Though it cannot be presented to the mind by definition, it may be *suggested* to the mind." That is, *A.* may have one ideal of insanity, *B.* may have another, and so on *ad infinitum*. Each may be antagonistic to one another, but all are correct according to this view. The mental mode of each man decides the sanity of every man but himself. The absurdity of this position is self-evident. There is no original ideal model of beauty, so there is no common standard to measure humanity by, like the imperial bushel in the British museum. In all, is a generic similarity, but a specific difference, and no correct judgment can be formed of important phases of sanity or insanity, without a knowledge of the *previous* history and *peculiarities* of each individual. Dr. Ray, in his medical jurisprudence, came near the truth when he said, "that to lay down any definition of mania founded on symptoms, and to consider every person mad, who may come within the range of its application, may induce the ridiculous consequence of making a large portion of mankind of unsound mind. Some men's ordinary habits so closely resemble the behaviour of the mad, that a stranger would be easily deceived; as in the opposite case, when the confirmed mono-maniac, by carefully abstaining from the mention of his hallucinations, has the semblance of a perfectly rational man. Hence, when the sanity of an individual is in question, instead of comparing him with a "fancied standard of mental soundness, his natural character should be diligently investigated, in order to determine whether the apparent indications of madness are not merely the result of the ordinary and healthy constitution of the faculties. In a word, he is to be compared with himself, and not with others." Russell, on criminal law, says that "idle and frantic humours, actions occasionally unaccountable and extraordinary, mere dejection of spirits, or even such insanity as will sustain a commission of lunacy, will not be sufficient to exempt a person

from punishment, who has committed a criminal act—a partial degree of reason—a competent use of it, sufficient to discern the difference between good and evil; then upon the fact of the offence proved, the judgment of the law must take place.” He properly hinges the whole case on moral discernment, or what has been called by writers on ethics, “a moral judgment,” accompanied by freedom of will to accept or reject alternatives. Habit, or congenital bias, may manacle in bands of adamant many an unfortunate. For the former he is directly responsible, and Aristotle makes the essence of virtue to consist in “practical habits, *voluntary* in their origin.” For the latter he is brought to account in law, if responsibility can be proven.

I have succinctly stated these views, at the present time, when the “insanity plea” is so commonly put forward; and because my views are not those commonly set forth in text books on such subjects. In a word I hold,

Firstly, that proof of a sense of right and wrong is only of secondary consideration, because conscience is in a sense subservient to observation, discrimination, and judgment. Dr. Alexander, in his “moral science,” says, “All experience and history show that man may act under the influence of an erroneous conscience. The dictates of conscience are always in conformity with the practical judgments of reason. When these are erroneous, conscience is erroneous.”

Secondly, inability to choose right from wrong is no plea, because in a popular and experimental sense that is common to all, and in a philosophical sense not true, because every volition we put forth we choose so to do, and in the act the *free* choice is done. If we are able to choose at all, then we avoid, voluntarily, the alternatives. The error and sophistry seem to lie in confounding freedom of will in intellectual acts, and moral decisions. The former is *always* free, but the latter may be fettered by passion, confirmed habit, or unhallowed desire.

Thirdly, impulse is insanity, pure and simple, only when accompanied by evidently irritational motives, or no motives at all; yet this insanity may be accompanied by a sense of right and wrong, and knowledge of penal consequences, and at the same time the agent not be guilty of crime, and punishable; for mental alienation does not mean loss of the faculty of reasoning, but the grouping together,

wrongly, of ideas, and calling them truths, although such are wrong in argument and principle.

Fourthly, a vast majority of cases of insanity can be traceable to physical disease, or malformation, consequently disease is not *per se* a bar to punishment; although it is not likely that the truth goes as far as the opinions of Dr. Beck (I. Med. Jur., p. 725) would lead us to believe, that "Insanity is essentially a bodily disease, and the moral causes operate in producing it, as they do in producing other complaints.

MEDICINE—AN HISTORIC SKETCH.

BY CHARLES M. BEAUMONT CORNELL, M.D., L.R.C.P.S., KN., TOLEDO.

Medicine, in its most comprehensive sense, includes everything pertaining to the knowledge and cure of disease; but, in a more restricted sense, the term is employed in contra-distinction to Surgery and Obstetrics; although the latter are properly departments of Medicine in the comprehensive sense of the term, yet, apart from principles common to both Medicine, Surgery and Obstetrics, they may be cultivated separately. The *Medical Profession* embraces all who devote themselves to the study and practice of Medicine proper Surgery and Obstetrics conjointly or separately. The term *Physician* is applied to a member of the profession who devotes his time and attention to the diseases which belong to the department of Medicine proper. The same may be said with respect to Surgery and Obstetrics. As it was in "olden times," so is it now; the physician may, or may not officiate in the departments of Surgery and Obstetrics. In [this country and in the United States most physicians are, of necessity, obliged to act also in the capacity of Surgeons and Obstetricians, and hence receive the name "*General Practitioners*."

The history of Medicine, with any degree of accuracy, dates back to the days of *Hippocrates*, considered the 18th lineal descendant from *Æsculapius*, the "*God of Medicine*," whose history is so involved in fable as to render futile any attempt at accurately tracing it, though his two sons, Machaon and Podalirius, gained at the siege of Troy such celebrity in the healing of wounds, as won the laudation

of the great Grecian poet, Homer. Hippocrates, then styled by most writers the "*Father of Medicine*," was born at Cos 450 (some say 460) years before the birth of Christ, and was a member of a family which had produced some eminent physicians before him, besides, by his mother's side, having descended from Hercules. Born with these advantages, and stimulated by the fame of his ancestors, he devoted himself early and zealously to the cultivation of the healing art. Ill-content with the empirical practices characteristic of his progenitors, he placed himself under the instruction of Herodicus, the founder of Gymnastic Medicine, * as well as other eminent philosophers. Unwilling to accept as *truth* every theory advanced and espoused by his instructors, he judged for himself, and adopted only those principles, which to him, appeared founded in sound reason ; and, in his researches into the science, he ever sought the true path of observation. Thus was he enabled to better elucidate the deductions of experience, and to sweep away the false theories with which Medicine had been so darkly clouded by those possessed of no practical knowledge of disease ; and the rational or dogmatic sect of physicians have always acknowledged Hippocrates as their leader. Galen declares that his writings should be revered as the voice of the Deity. Most of the numerous treatises—some seventy-two in number—attributed to him appear to have been the accumulated knowledge of his immediate ancestors, which he simply collected and compiled. For the accuracy and fidelity with which he describes the phenomena and progress of disease, he has scarcely been surpassed. Although many of his doctrines are erroneous, they have, at least, the merit of being in advance of those of his predecessors. Of all his writings, his "*Aphorisms*" are the most important, comprising a collection of all the conclusions to which his researches had conducted him, with a general review of all that was known of Medicine and Philosophy in his day. They were

* *Gymnastica*, from "*Gymnos*," naked. *Gymnastic Medicine* relates to the cure of disease by exercise, or the rules to be observed in the different varieties of exercises concerned in the preservation of health. As master of an academy where warlike and manly exercises were taught, Herodicus, of Salymbra, in Thrace, observed his pupils to be very healthful, and adopted exercise both as a preventive and curative measure in his practice of physic. Hippocrates censures him for having carried his views to excess, and Plato warmly condemns his practice of enjoining his patients to walk from Athens to Megara, a distance of over twenty miles, and to return home on foot as soon as they had touched the city walls.

so highly prized by the Medical fraternity of those days, that they have been translated into many modern languages. His "*Prognostics*," too, abound in interest.

So involved in obscurity and fable is his life, that no further notice may be taken of it except that he appears to have travelled much and practiced his profession in many places. His last abode was at Laryssa, in Thessaly, where he died at the ripe age of 99. He had two sons, Thessalus and Draco, whom he educated to the profession, and a daughter whom he gave in marriage to his favorite pupil, Polybus, by whom all his writings were arranged and published. The memory of Hippocrates is still venerated in Cos; and it is said the inhabitants of that island still exhibit a small house, which they firmly believe to have been his residence. With Plato he shared the title of divine; statues and temples were erected in commemoration of him, and his altars covered with incense like those of the deified Æsculapius himself.

Hippocrates entertained peculiar ideas as to the composition of the body, believing it to consist of the four elements, earth, air, fire, and water, united in various proportions to form the four cardinal humors, *blood, phlegm, yellow bile, and black bile*; to the maintenance of the equilibrium of which he attributed *health*, and to the loss of this balance, *disease*. Thucydides informs us that when the pestilence swept through Attica, he staid its progress by building large fires to neutralize the infection.

He supposed the contents of the arteries to be air, and confounded the nerves with the other white tissues of the body, as ligaments, tendons, &c. The brain he considered a glandular mass whose office was the secretion of mucus. He was, however, well versed in all the external phenomena of disease, upon which he based his doctrines of critical days.

His materia medica was by no means despicable. As sedatives, he employed hemlock, henbane, and the juice of the poppy, from which we now obtain our opium; as emetics, he had resort to hellebore and hyssop, while he employed scammony, elaterium and spurge as cathartics.

Hippocrates was the true type of what every physician should be, considering it obligatory upon the practitioner to pay the most scrupulous attention to the advantages of the sick, and to observe the strictest chastity and inviolable secrecy concerning matters

which ought not to be divulged—traits of character which should adorn every follower of the profession. He placed great reliance upon the power or principle which he denominated *Nature*, whose inherent tendency, he believed, was to the preservation of health and the removal of disease ; and he admonished all to closely observe and carefully promote nature in her efforts, “at the same time correcting morbid conditions by their opposites,” and endeavouring to persuade the fluids to assume their wonted channels. In acute disorders, he relied not so much upon medicine as great restriction of diet ; these means, in conjunction with gentle emetics, laxatives, and clysters, failing, he pursued a very active course of treatment, employing powerful cathartics, sudorifics, and diuretics. He counteracted violent pain by bleeding, and employed cupping with a view to its revulsive effects. Trephining was not unknown to him, for he advised it in cases of violent headache. Fire and the knife he used where medicines failed. Surgery, however, he thought should be practiced as a profession by itself.

(*To be continued.*)

NOTES ON OBSTETRICS.

BY A. B. ATHERTON, M.D., L.R.C.P. & S., FREDERICTON, N. B.

RETAINED PLACENTA.

Case I,—Mrs. B. E———, *æt.* 38, multipara. Had miscarriage at 6th month, in June, 1871. The physician then in attendance did not wait to see the placenta away, but said it would give no trouble, but come away itself. For three weeks the patient had a discharge of bloody water ; subsequently, little or nothing came away, till August 21st, when, while engaged at her ordinary house-work, there was a sudden gush of blood from the vagina, accompanied with faintness, pallor, and coldness. I was at the house in a short time, and found her pale and almost pulseless. On examination, the vagina appeared filled with clots ; and, on passing up the fingers into the uterus, I felt a mass, which I took to be an adherent placenta. With considerable difficulty this was peeled off. It measured about $3\frac{1}{2}$ or 4 inches across, and was about one inch in thickness. It was of a light-flesh colour. No appearance of cord or membrane.

I did not notice that any portion of the mass had been separated from the uterus so as to give rise to the hemorrhage.

The woman made a rapid recovery.

EARLY ESCAPE OF LIQUOR AMNII.

Case II.—*Mrs. P. S*———, *æt.* 32, mother of three children. Quick and easy labours. Pregnant the fourth time.

October 30th, 1872.—Sent for to ascertain whether she was in labour or not. She did not expect to be confined for a month or more, but within a few hours of my seeing her had felt considerable pain, which seemed like those of beginning labour.

Previous history.—On or about the 20th of August, after lifting a heavy weight, found, as she termed it, that her “water came away” whenever she was up and about. It troubled her very little at night, or on lying down during the day. This has continued ever since, but though she thought it strange, she said very little about it to anyone. At the first appearance of discharge there was slight pain, but none to complain of since till the present. Now she says her “water comes away” during the pains even while lying down. On examination, I found the os dilated to about $1\frac{1}{2}$ inches; scalp of the child felt bare; liquoramni coming away in small quantity. After three or four hours of severe labour she was delivered. She states that the labour was much more difficult than usual. Waters generally broke near the last.

The child appeared to have been carried not more than eight months, as the mother had said. It was, however, healthy, and cried pretty strongly. I noticed after delivery that the lower limbs were very strongly flexed upon the abdomen, so that it required considerable force to extend them at all; and, on removing the force, they returned to their former position, resembling a case of false anchylosis. After a short time they began to relax more and more, and subsequently the child did well.

MEDICAL SOCIETY FOR MUTUAL IMPROVEMENT.
ST. CATHARINES ONT.

DR. TURQUAND, of Woodstock, contributed a paper
ON DISLOCATION OF THE ELBOW JOINT, OF OVER NINE WEEKS STAND-
ING, SUCCESSFULLY TREATED AFTER DIVISION OF THE
TRICEPS TENDON, &C., &C., &C.

In the month of March, 1870, a young girl, aged 11 years, was brought to our office for treatment.

The history given was, that on the 11th day of January previous, the little girl, while running, fell upon the ice and sustained an injury which was diagnosed by the Surgeon sent for at the time of the accident, as fracture of the humerus, and was treated as such with a long, straight splint, extending from the shoulder to the hand.

The arm was thus fully extended, hanging down by the side, and with the additional weight of splints and bandages, dragging down the shoulder, rendering the whole limb useless, cumbrous, and eminently uncomfortable. These appliances being removed, a very careful examination was made, both by myself and my partner, Dr. McKay. Neither of us could discover, after prolonged manipulation, any evidence of fracture, and we concluded that it was a case of complete dislocation of both bones of the fore-arm backwards. Now the question at once suggested itself, whether to attempt replacement of the bones so long after the occurrence of the accident, or to perform resection of the joint. As there was slight—and although *very slight*—still *sufficient* mobility of the parts remaining to prove that *complete* ankylosis of the joint had not yet taken place—we felt strongly inclined to attempt reduction; although from recorded cases of the kind, very little, if any, encouragement was held out for our success.

After careful consideration of the case, in consultation with Dr. G. L. Beard, of this town, we decided upon making the attempt. Failing in this, we should still have the operation for resection to fall back upon, should it be deemed advisable. At this time, be it remembered, the little girl's arm was worse than useless. Our plans being matured, and a day fixed for the trial, 11th of March, 1870,

65 days after the accident, (Dr. Beard and Dr. Williams, of Ingersoll, concurring and assisting in the operation,) the child was placed upon the operating table, the pulleys properly adjusted, and the patient put under the full influence of chloroform. Careful and continuous extension was then kept up steadily for 15 minutes, but without any appreciable result. I then, with a small tenotomy knife, divided the triceps tendon close to the olecranon, and all intervening tissue down to the bone. Extension still continuing, there was gradual yielding of the tissues, to the extent of from half an inch to three quarters of an inch. The pulleys were now let go, and flexion and extension firmly persevered in. By these means the preternatural adhesions were felt gradually giving way, the bones, slowly returning to their places, (without any jerk) and the fore-arm was brought to an acute angle with the arm. Full extension and flexion were now repeated two or three times, and all present satisfied themselves that the reduction was complete.

Our little patient being sent to bed, the arm was placed in a semi-flexed position, and an evaporating lotion constantly applied. The constitutional disturbance was not great. Nine days afterwards, careful and slight passive motion was commenced; this, however, produced so much irritation and swelling that we could not repeat the attempt until ten days afterwards, from which time gradual movement was persisted in without causing any untoward symptom. We found, however, that the involuntary tension of the muscles could not by these means be entirely overcome.

On the 28th of April, about six weeks after the first operation, we succeeded, under the use of chloroform, in completely flexing and extending the arm. From this time the case progressed favorably to final and complete cure.

DR. GOODMAN was much pleased with the interesting and important paper just communicated. He would have it incorporated in the minutes, and published with the proceedings of the Society.

He was most struck by the circumstance that our correspondent only found it necessary to divide the tendon of the triceps—a much less formidable procedure than that discouragingly hinted at by Gross, of dividing the structures in front of the joint, with the imminent risk of wounding the brachial artery and the nerves of the part. In recent dislocations of the *Ulna* and *Radius* backwards and upwards, the difficulty in the reduction was doubtless due to the great

tension of the biceps, and brachialis anticus, which kept the coronoid process of the ulna in close apposition to the inferior and posterior extremity of the *humerus*, in the depression behind the *trochlea*. He had recently been called to see a case in which, owing to the powerful muscular contraction of the *brachialis anticus*, in internal lateral dislocation of the *ulna*, reduction could not be effected without the aid of chloroform. In long standing cases, however, the flexor muscles would probably lose their contractile power to a great extent from over tension, and the triceps being relaxed, shortened, and out of use, would contract; thus forming after a time the main obstacle to the reduction of the dislocation. This seems to have been proved by the result of the treatment adopted in the very interesting case submitted for our consideration this evening.

The Chairman, Dr. Sullivan, begged to thank Dr. Turquand for the very instructive, interesting, and important paper, contributed by him this evening. There is no doubt we learn much in correcting the mistakes of others, as well as remedying, when possible, not a few of our own. That this form of injury is difficult of diagnosis is generally attested by authors on Surgery; and, frequently, it is only by taking the signs of fracture in the vicinity of a joint, with those of dislocation, collectively, that we can arrive at an accurate opinion; and that such is most necessary for the proper treatment will be quite obvious.

He found it difficult to account for the disparity between the diagnosis and treatment of this case, by, he presumed, a regular practitioner, and why he was not fortunate enough to reduce the dislocation is surprising, as Druitt recommends forcible straightening of the arm in this case. It is indeed important that we should have such an easy mode as that proposed by Dr. Turquand, for remedying the great deformity which supervenes on 1stly, an error of diagnosis of this kind. 2ndly, from no treatment: a case of which he saw recently, or, 3rdly, from some complication such as fracture.

1stly.—It would be well to examine what structures are ruptured and the relation they probably bear to each other in their altered position, so as to ascertain what cases are eligible for this operation. In dislocation of both bones backward, the head of the radius is lodged behind the external condyle. The coronoid process of the ulna is in the olecranon fossa. All the four ligaments are ruptured except some fibres of the internal lateral; the annular ligament re-

mains entire. The brachialis and biceps muscles are either stretched or torn; the triceps and muscles of fore-arm relaxed; the median nerve pressed forward, and the ulnar nerve is sometimes painfully stretched over the projecting extremity of the ulna.

This latter condition of the nerve would be the principal if not the only objection to Dr. Turquand's operation, in unreduced dislocation of short period after occurrence.

2ndly.—It will be well to enquire what are the pathological conditions existing in unreduced dislocations after a lapse of time, and how far they may be remedied by this operation. There is a new joint formed by the head of the bone. If on a muscle, it consists of a capsular ligament, of condensed cellular tissue. If on a bone, the periosteum throws up a bony rim, and the surrounding cellular tissue produces a capsular ligament.

The cartilage of the head of the bone becomes eburnated, or a synovial capsule may be substituted. The ligaments may become attached to the ends of the humerus. The muscles which act on the displaced bones become permanently shortened, and accommodated to the altered position of the bone, and assist in retaining it in its new sphere. The ruptured tendons may have acquired new attachments between the bones. The brachial artery may become adherent to the torn capsular ligament. Lastly, the natural cavity, as well as the track of the displaced bones becomes filled up and obliterated by a dense fibrous deposit.

3rdly.—We should ascertain what means have been employed, and how long after the accident would we be justified in resorting to remedial measures. In some six successful cases recorded, treated by the ordinary mode of extension and counter extension, the shortest period is six weeks, after eight hours extension, at intervals; and the longest twenty-five months, with treatment continued twenty-two consecutive days. But the best indication for treatment by this mode would be how much mobility existed, and how far the proper function of the arm had been restored in its new position; for as the new joint becomes more complete so proportionally the old one becomes destroyed.

As a matter of course, the treatment by subcutaneous section does away with the proposition of time, as it may be performed immediately after the extension and counter extension have been tried and failed, but I would not feel inclined to resort to it without

more than one trial by the ordinary means. The best I believe will be in the selection of proper cases and the expediency of its application.

This mode of treatment was first recommended by Sir Charles Bell in reduction of dislocation of the thumb backwards and has since been practised by Liston, Rheinhardt, Gibson of Philadelphia, and Parker of New York. Dieffenbach of Berlin divided the muscles and adhesions in reduction of a dislocated humerus of two years standing, also a luxation of the foot backwards, of a year's duration by division of the tendo achillis.

Blumhardt in reducing an old dislocation of the elbow, after dividing the several tendons and ligaments, without effect, made an incision on either side of the false joint, laid open the capsule divided the adhesions and replaced the bones."

NOTES IN PRACTICE.

CASES UNDER THE CARE OF DR. FOWLER, KINGSTON.

(Reported for the Lancet by Mr. Fenwick.)

J. M. æt. about 70 was taken suddenly ill on March 8th, after a severe fit of coughing, with chills, severe pain in the abdomen, and vomiting. Dr. Fowler was called in and found a soft tumour in the right inguinal region, having all the appearance of a hernia; an impulse was communicated to it on coughing, and the patient stated that he had observed the same tumour there previously. He was put under the influence of chloroform, and the tumour was returned within the abdominal ring. March 11th.—Pain still present; tumour descended on coughing. The symptoms of strangulation being very decided, Dr. Fowler, in company with Drs. Lavell and Sullivan, proceeded to operate. Having cut down on what was believed to be the hernial sac and opening it, about a tablespoonful of old pus was discharged. Immediately underneath was the spermatic cord; the finger was then introduced as far as the internal ring, and no hernia was found to exist. A stitch was then put in the upper part of the wound, and a poultice applied.

March 12th.—The patient feels a little better; more pus has come away; bowels not moved.

March 13th—Bowels still confined ; vomiting and increased pain. Peritonitis subsequently set in, and the patient lingered in great distress, vomiting having been almost continuous, and for some days stercoraceous, until the 17th, when he died. A post mortem was not allowed.

CASE OF STRANGULATED SCROTAL HERNIA (RECOVERY.)

Fred C., æt. 19, a strong healthy young man, was employed as "moulder" in the Provincial Penitentiary. On the 3rd Dec., while quickly lifting a weight of about 90 lbs. off the moulds, strained himself severely. On arriving home, a distance of 2 miles, he found a swelling on the right side of the scrotum about the size of a large orange ; went to bed and was seized with vomiting. In the afternoon, Dr. Fowler was sent for. He found the tumour tense and circumscribed ; very little swelling in the groin, and the testicle could not be felt. When the patient coughed, on applying the hand to the scrotum no impulse was felt, but there was an impulse felt on applying the fingers over the groin. The taxis was tried but without success ; ordered a lead lotion to be applied continuously.

Dec. 4.—Did not sleep during last night ; vomiting continuous ; bowels have not been moved ; tumour continues the same ; considerable pain on pressure, and dragging pain in the umbilical region ; no distension of abdomen ; pulse 80, soft. In the evening an injection of soap suds was given, but the bowels did not respond.

Dec. 5.—This morning the tumour is less tense ; does not appear so circumscribed ; more swelling in the groin ; and the general symptoms of strangulation are more decided. Chloroform was administered and reduction by the Taxis attempted, but without success.

At 3 p. m., Dr. Fowler, assisted by Dr. Lavell, proceeded to operate, having put the patient again under the influence of Chloroform. The usual incision was made, and upon opening the sac about 6 inches of omentum dropped out of the wound, while about 2 inches of intestine, and the testicle came into view.

The knuckle of bowel appeared to be healthy enough, but a portion of the omentum was of a very dark colour. The stricture, which was found to be at the internal ring, was then notched by a

hernia knife guided by the finger. The intestine was returned, and then the omentum, and the testicle being replaced in the scrotum, the wound was brought together by three sutures, a compress soaked in carbolic oil was applied, and a bandage adjusted. There was scarcely any hemorrhage, not a tablespoonful having been lost altogether.

8 o'clock p. m.—Has vomited occasionally since the operation; complains of pain on pressure. An opiate was administered; and hot fomentations to be applied continuously to the abdomen.

Dec. 6.—Slept well last night and feels pretty comfortable; symptoms of strangulation gone; pulse 80; has retained on his stomach some nourishment; wound looks well, and appears inclined to heal rapidly.

Dec. 7, morning.—Slept well last night having taken an opiate, and awoke with no pain to speak of; bowels have not moved yet, since the accident; pulse 64; has had no fever nor chills.

Evening.—He is in better spirits; bowels have been moved without the aid of medicine, and all pain has gone, even on pressure; wound healing rapidly without any discharge.

Dec. 8.—Slept well last night by the aid of an opiate, and feels so strong that he wishes to get up. The stitches were removed, and strips of adhesive plaster applied to the wound.

Dec. 10.—Slept well last night without medicine, and feels better in health and spirits.

Dec. 13.—Still convalescent; pulse 52; wound has healed without any discharge taking place from the first; and he expects to return to work in a few weeks.

LIGATURE OF THE SUBCLAVIAN FOR AXILLARY ANEURISM.

By A. H. HUGHES, M.D., *Assistant Surgeon, Bombay Army.*

LADOO, aged 25, policeman, in the service of the Rajkote state, was admitted in the civil hospital, Rajkote, suffering from a tumour about the size of an orange, which was situated in the axilla, and which, he stated, appeared for the first time twelve days previously.

There was considerable pain extending into the forearm and

hand, and a sense of numbness was complained of. Expansile pulsation and *bruit* could be easily detected; the lower border of the fold of the pectoralis major was pushed forward, and the clavicle slightly raised.

There was nothing in the history of the case indicating violence, neither was there a history of syphilis nor rheumatism; but the man was addicted to the use of opium.

On December 25th, 1872, chloroform was administered, and I ligatured the subclavian in the third part of its course. No difficulty was experienced during the operation, though the artery was deeply situated, owing partly to the elevation of the clavicle by the aneurism. Pulsation immediately ceased, and the aneurism consolidated.

The ligature came away on the twelfth day, and the wound speedily healed. From this time to the 12th of March, a period of eleven weeks, no change whatever took place: no pulse could be felt at the wrist; the tumour was consolidated, but did not diminish in size; and as there was considerable pain in the hand, owing to the pressure of the indurated mass on the brachial nerves, causing restlessness and uneasy sleep, it was determined to get rid of the sac and its contents by inducing suppuration in it.

For this purpose a trochar and canula was introduced, and the mass of coagulated blood contained in the aneurismal sac was thoroughly broken up.

This produced the desired effect; suppuration ensued, a free exit was given for the pus; the tumour gradually diminished in size; and on the 10th of April, the wound having healed, he was discharged from the hospital cured.

At the time of his discharge no pulsation could be detected in the radial artery.

REMOVAL OF THE PENIS AND SCROTUM, THE RESULT OF AN ACCIDENT.

BY E. J. OGDEN, M.D. OAKVILLE, ONT.

On the 4th of Sept. 1872 I was called to see A— M—, æt. 20, married about 6 months, who was seriously injured and mutilated by a threshing-machine. While scuffling with a comrade

one leg of his pants, at the lower and back part was caught by the bolt at the coupling of the tumbling shaft and quickly wound about it. By a powerful and sudden movement he faced about but was drawn astride of the rod. His clothes were torn from him and, with them, the penis and scrotum. When I reached the barn where the accident occurred—a distance of four miles—nearly an hour had elapsed. He had lost considerable blood and was in a state of partial collapse. Examination revealed a frightful wound. The penis and scrotum together with the integument was torn from a surface about 7 inches from before backwards, and 5 to 6 from side to side, commencing above the symphysis pubis and extending irregularly backwards nearly to the margin of the anus, wider in front than behind. The testicles were pendant in this space by their cords of which the left was stretched and somewhat bruised. The left testicle was at a considerable distance from the integument—the right nearer—perhaps an inch away—and uninjured except in being in common with its fellow, stripped of integumentary covering. Where the penis and its crura were torn from their attachments a large and deep cavity was left through which the rami of the ischia and pubes could be directly touched. The wound, corresponding to the removed integument, encroached upon the left thigh; it was abrupt on its right margin, and oblique on the left. The urethra was torn off at the anterior margin of the prostate gland.

Assisted by Dr. Wright, of Oakville, and Dr. Buck, of Palermo, the patient was brought under the influence of chloroform; both testicles were removed, a catheter was introduced into the bladder, the wound approximated, and he was placed in bed. He recovered quickly and well from the anæsthetic, but complained of pain and pressure at the neck of the bladder; had an opiate administered (3 p.m.,) and another at night.

Sept. 5.—Rested pretty well at intervals during the night; bladder contracts spasmodically and violently, painful and irritable; desire to micturate, frequent. Urine passes by the side of the catheter, through what remains of the urethra, as well as through the instrument. The wound has been dressed with lint wet with solution of carbolic acid—one part to 30 or 40 of water.

Sept. 6.—Continues much the same; opiate at night; catheter removed, cleansed and returned daily.

Sept. 7.—Wound looks well, bladder less irritable, and desire to

urinate less frequent. Catheter incrusts greatly; ordered to be removed, and to be introduced only when required, which is often as the bladder retains or tolerates but a small quantity.

Sept. 12.—Bladder acts spontaneously but forcibly and spasmodically; must be emptied instantly when the desire comes on. Wound granulating satisfactorily. The pulse has not been quick, nor the skin hot. Patient can, after commencing, pass the urine in a stream, but prefers having the catheter used to prevent the urine from coming in contact with, and causing smarting in the wound.

Oct. 1.—Wound has contracted considerably; ligatures came away duly; catheter introduced very frequently to prevent contraction; doing well.

Dec. 4.—Wound continued to heal without interruption, and is now entirely closed, except the small opening opposite the urethra, which is so contracted as to require force in inserting the catheter. This the patient can readily do himself, and he inserts it frequently in order to keep the channel dilated. The patient was able to walk about the end of September, but he is still slightly lame. I sent him to Toronto in December to see Dr. Hodder respecting some appliance to aid in micturition; have not seen him since. His friends tell me he is in pretty good health, but pale and thin. He is at present doing duty as a bridge tender on one of our railways.

CORRESPONDENCE.

[To the Editor of the *Canada Lancet*.]

DEAR SIR,—During the past five or six years I have witnessed several remarkable and in every instance perfect cures of what I can unhesitatingly and confidently declare to be well authenticated cases of Cancer. Being thoroughly impressed with the conviction that the means adopted to perform such marvellous results was well worthy a careful and impartial investigation, I therefore examined each case critically fully determined to expose the fallacy of the very modest claims set up in behalf of the so-called "Cancer Ointment"—at the same time I fully recognized the great blessing it would confer upon the many suffering from this loathsome disease, if it should really prove successful. I therefore applied to the individual

(a school teacher) by whom the remedy in the cases above mentioned was prepared, for the prescription, but to my astonishment was firmly, yet respectfully refused. A prolonged conversation ensued, during which the merits and value of the ointment was fully discussed. I learned that for many years the remedy had been used with great success in the State of Vermont, and that the receipt had been carefully preserved in the family of the School Teacher for many years, and was considered a perfect panacea for all manner of malignant ulcers, amongst which Cancer was prominently named. However, as a compromise, I suppose, a small quantity of the ointment was placed in my possession, and I then determined to test its efficacy in such a manner as to place its value beyond a doubt, in my estimation at all events, *and this I have succeeded in doing*, and am *now* thoroughly convinced of its curative properties as regards Cancer more particularly. And I have not the slightest hesitation in recommending it to the favorable notice of my Professional Brethren. For the past eighteen months I have been in possession of the formula by which the Ointment is prepared; the ingredients being so simple that, I was at first inclined to believe that I had been the subject of an imposition, but use has confirmed its immense value beyond the shadow of doubt, I sincerely regret that my pen is shackled by a very foolish promise I was obliged to make before obtaining the desired information—viz, not to reveal the method of its preparation and administration. I trust, however, soon to be released from this unfortunate promise, and it will then afford me the greatest gratification to spread the prescription broadcast. At first I determined to keep the subject entirely to myself until I succeeded in gaining permission to publish it in full—but upon reflection I decided to give any Medical Man, who may apply for it, a small quantity of the Ointment *gratis*, so that it may be thoroughly tested, and its therapeutic value decided. I will now relate the history, treatment, and results of three cases of undoubted Cancer, coming under my notice within the past eighteen months. First Case—J. C., aged 27 years, a temporary resident of Boston, Mass., employed when there as driver of an Ice Waggon, presented himself at my office, on the 16th Sep. 1871, and requested me to examine a sore as he called it “on his mouth,” it was then covered with an ordinary pitch plaster, which he removed with difficulty, as the parts were very irritable. I examined the so-called sore, and found it to be an Epithelial Cancer,

about the size of a ten cent piece, situated upon the lower lip at the right angle of the mouth. The edges of the ulcer were hard and everted, the discharge although not very abundant, was thin, acrid, and very offensive, causing considerable irritation of the surrounding parts, presenting an angry red appearance extending below the jaw—and causing the patient much inconvenience.

Case No. 2, Mr. H. P.—A farmer, residing in the adjoining Township of Compton—"Some ten years ago I first noticed a hard lump, about the size of a kernel of wheat just below my right eye—"after a little time it began to gather and discharge a watery fluid, "which I frequently squeezed out, but after a while I found that this "process produced much subsequent irritation, and pain. It is now "about two years since I first noticed a gradual change taking place "in the appearance of the tumor, until, as you now see, it is an open "sore, which occasionally scabs over, but the discharge is continuous, "and the pain is becoming very troublesome." The following is the appearance it presents at the present time. The ulcer is irregular in shape, the whole of which might be covered with a twenty-five cent piece, the edges are everted and very dense, it is now covered by a dark brown slough, from beneath which issues an ichorous exudation somewhat unpleasant to the smell, and very abundant when we take into consideration the size of the ulcer—pain is now constant, which the patient describes as being of a sharp stinging character—after having examined the ulcer carefully, I had no hesitation in calling it an undoubted Cancer And in this diagnosis I have been upheld by several prominent Surgeons to whom the case had been submitted. In reference to Case No. 1, I beg to state *en passant* that the patient being extremely anxious about his life, had consulted a great many Physicians in Boston — amongst whom was the distinguished Surgeon Dr. Bigelow, and was advised to have the diseased portion of his lip extirpated immediately as it was an unmistakable Cancer.

Case No. 3, Mrs. J. H. Age 26—A young married woman, residing in the neighboring Township of Bronton. Has been married two years. Has had one child (female) born 29th August last. The patient is far from being a healthy woman—some six years ago she first noticed a small lump, about the size of a filbert, located in her left breast, it did not seem to grow, nor did she experience any trouble whatever from its presence, until the time of her pregnancy

when the tumour began to grow rapidly, and the part became very painful. She was safely and easily delivered, and progressed favorably for about two weeks, when suddenly an abscess formed in the left breast, just over the site of the tumour, which at this time had attained the size of a pigeon's egg. The *abscess* was opened and relief followed immediately, but after discharging about a week ceased doing so and re-formed, which necessitated a second opening: the pain was almost excruciating—represented as being of a burning, lancinating character, and extending to the lymphatics with which this part is abundantly supplied: the discharge was now a thin sanies, exceedingly abundant and extremely offensive—the wounds caused by the two openings had become one large ulcerated sore; the edges of which were very hard, serrated, and everted. It had evidently become connected with the tumour to which we have before alluded—this tumour was now soft but no longer moveable, and upon manipulation presented a nodulated surface. At first when I was consulted I immediately advised excision of the entire left breast—but to this procedure the patient expressed the utmost repugnance; whereupon as the only alternative I proposed the use of the Ointment now under discussion, and although I could not promise any relief from its administration, the patient was only too anxious to try anything and everything before yielding to the knife. The treatment and results are similar in all three cases. At first if any slough is found upon the Cancer, it is to be removed carefully; do not injure anything like healthy granulations; wash the part with tepid water and dry it by the application of a piece of lint, then having spread the Ointment upon a piece of Chamois leather apply it to the Cancer. Allow this to remain as long as it continues perfectly adherent, but the moment you notice that it is not so, take it off and apply a fresh plaster. Continue the application until the opening becomes filled with healthy granulations—still persevere and you will be rewarded by the entire surface of the wound being covered by healthy *cutis*.

Yours Respectfully

J. HAMILTON BURLAND,

Hatley, 2nd. January 2nd, 1873.

To the Editor of the LANCET.

SIR,—Your Journal being the medium through which to make our various grievances heard, I take the liberty of laying before your

readers one of mine, hoping it may be the means of saving a confrere from being victimized in a similar manner, or perhaps provoking discussion on the merits of the Registration Act, with reference to qualified Medical Practitioners.

Last March, during a very cold period of that month, it fell to my lot to attend a poor woman named Nichol, living then at Strabane, in the Township of West Flamboro, County of Wentworth, who was suffering from, and subsequently died, of peritonitis. Being at the time very busy, I omitted to send in my return to the District Registrar in the specified time according to the Act. Having no blanks in my possession at the time, I intended calling for some the first opportunity. To my very great surprise I was served with a summons to appear before a rural magistrate, nine miles from my residence, on a certain day, at 5 o'clock p.m., to answer to a charge preferred against me by the Registrar, of wilfully neglecting to register the death of the above named patient. On the appointed day, I hastened away, neglecting urgent duties in my practice ; but filled with profound awe at the majesty of the law. I arrived at the spot mentioned in the summons half an hour too soon. I waited until about twenty minutes to six, no functionary in the shape of a magistrate appearing. I left and came home. Two or three days after, I received a copy of a conviction, fining me ten dollars, and seven dollars and fifty cents costs. The conviction was dated the day after the one on which I was summoned to appear. I considered I had been very unjustly dealt with, and was led to take legal advice on the case. I was advised that the proceedings were altogether at fault, that the conviction was wrong, and that the whole thing could be quashed on the conviction alone. Under the circumstances, I was led to appeal, but before the case came into court, I was told that another conviction had been prepared. Feeling that no redress could be got in that quarter, I ordered the appeal to be withdrawn. The matter remained *in statu quo* for a few months ; then, without any notice, I was called on by the gentlemanly bailiff, requesting the small sum of twenty dollars, which, after some little demurring, I paid ; that was in the beginning of December. Last evening, the 13th of January, the same gentlemanly bailiff called with another writ, (and a document, the nature of which I could not understand,) with another modest request for seventeen dollars and twenty-five cents, which as before, with some demurring,

I also paid. How much longer I am to be subjected to the repetition of such demands from the sharks of the law, is to me a query. If you could advise what course to pursue in case of any further demands, you would confer a great favor.

Yours truly,

GEO. METHERELL M.D.

Freelton, Jan. 14, 1872.

Selected Articles.

FRACTURE OF THE SKULL IN BROCA'S REGION; PARALYSIS OF THE RIGHT SIDE; LOSS OF POWER OF SPEECH; DEATH; AUTOPSY.

Although no single explanation seems sufficient to account for all cases of aphasia, still it must be granted that in the vast majority of the permanent cases there is paralysis of the right side, which is associated with some disease or injury of the posterior part of the third left frontal convolution of the brain. That this does not always obtain is fully proved by cases recorded by Vulpian, Charcot, and even Broca himself, in which there was aphasia but no disease of this portion of the brain, or disease of this part and no aphasia. Further, Trousseau gives a case in which there was well-marked aphasia with left hemiplegia. Nevertheless the following case is of interest, as showing a direct injury to this part of the brain followed by complete aphasia and subsequent paralysis of the right side. It is doubtful, however, whether the large effusion of blood was directly due to the injury, or took place secondarily from an injured or diseased vessel. It is difficult to believe that so extensive a destruction of brain-substance by the extravasated blood should not declare itself by paralysis of the right side till so many hours had elapsed. It is probable that the injury gave rise in the first instance to only a slight effusion of blood, but that this gradually increased till it assumed the dimensions found at the autopsy.

J. H——, a workman employed at the London Hospital, in a quarrel with one of his fellows, was struck on the left temple with

the leg of an iron bedstead at about 5 P.M. The case was supposed to be one of scalp wound, and the patient was allowed to go home. It was not ascertained at this time that there was any affection of the speech. About three hours after the accident he was seen walking to his home, a distance of two miles from the hospital. On reaching home his wife, alarmed at the sight of the bandages, asked him what had happened, but, being unable to speak, he made signs for a pencil and paper. Before getting these he touched his head with his left hand (he was a left-handed man), pointed to the leg of a bedstead, and then clenched his hand as if striking a blow, which an intelligent neighbour interpreted to mean that he had received a blow on the head with the leg of a bedstead, to which he nodded assent. He then went to bed, using both his hands in undressing. A medical man being called in, it was directed that he should be brought to the hospital. To this the patient agreed, but in dressing it was noticed that he could not use his right hand, and, in walking to the cab, that he dragged his right foot. On arriving at the hospital he was quite insensible. Mr. McCarthy was then sent for, and saw him for the first time at 11 P.M., when he was unconscious and breathing stertorously; the right side paralyzed and the left convulsed; left eye intolerant of light, the right insensible to touch and light. At the bottom of the wound was a depressed fracture, at the anterior part of the left parietal bone. The history of the case pointing to gradual increasing compression of the brain on the left side, probably from effusing blood, the wound was explored, and some overhanging bone removed with a trephine, and the depressed portion raised and withdrawn, with some splinters that had been driven under the sound portion of the parietal bone. There was a free flow, uncontrolled by pressure on the carotid, of dark-coloured blood, but no wound of the dura mater was detected. A firm compress and bandage were then applied.

Next morning the man was quite conscious and in so far improved. The convulsions on the left side had ceased. The right side was still paralyzed as to motion, but when his hand or foot was irritated he used the left hand or foot to protect himself. He perfectly understood all that was said to him, and readily attempted to do all that he was directed. He did not protrude his tongue when asked, but it did not seem as if that were from paralysis of that organ, as he opened his mouth and showed the tip of the tongue,

which was in the median line. He continued in this way until the fifth day, his breathing gradually becoming more difficult, and he died. From the time he was first seen by Mr. McCarthy until his death he never uttered a word, nor could he write, although he made several attempts to do so.

At the post-mortem examination the fracture was found to have traversed the course of the middle meningeal artery, which had not, however, sustained any injury. There was a laceration of the dura mater, some distance from the margin of the opening in the bone, which had doubtless been caused by one of the splinters removed at the operation having been driven through it at the time of the accident. There was no blood between the dura mater and bone, or in the archnoid sac. There was a very little ecchymosis in the pia mater at the bifurcation of the Sylvian fissure, and beneath that a very small clot in the brain-substance. On tracing this there was found a large clot imbedded in the frontal lobe at its posterior part, coming to the surface by only a very small extent. It occupied the portion of the lobe corresponding to the interior and posterior part of the external frontal convolutions, and very closely bordered on the central lobe. When the clot was removed the brain-substance presented the usual appearance when a clot has been found after an apoplectic seizure. The right hemisphere was ecchymosed very superficially. The vessels of the brain were very much diseased. The basilar artery was varicose and opaque, and the inner coat was readily peeled off, showing the atheromatous degeneration beneath. The middle cerebral artery and its branches were in a similar condition. The other viscera were normal.—*Lancet*, Nov. 16, 1872.

TREATMENT OF SCARLET FEVER.—The late Prof. Geo. T. Elliot, in a lecture on this disease, gave the following method of treatment: To bring the eruption out, if it has not already presented itself, order hot baths and blankets. Give nothing to eat at first in the eruptive stage, and only the simplest nourishment the first day. Patients experience great relief from baths, and the application of cold cream, or mutton tallow over the whole body. Visit the patient twice a day. By pouring a pitcherful of cold water over the back of the neck, especially when the glands are enlarged

great comfort is experienced. As a gargle make use of chlorate of potash or soda. Pieces of ice are good in the mouth. Sprays thrown in with Richardson's instrument, of lime water, solutions of alum and sulphate of zinc are beneficial. As a palliative to the throat, the vapor from slacked lime can be recommended. Strong beef tea with opium, may be thrown up the bowel. Begin to feed the patient from the second day of the eruption with animal essences. If the tonsils are enlarging and the pharynx exhibits much redness, with diphtheritic exudation, the physician has a right to say that things look bad. If the throat symptoms do not mitigate on the fourth or fifth day, the voice being affected, then one feels there is a good deal of danger. When the kidneys show, by peræmia, desquamation, or transitory albuminuria, then there is a two fold danger. Always examine the urine when the patient has kidney disease; the treatment should be directed to the skin and bowels; when the latter are loaded and constipated, give powerful saline cathartics.

Get Ronochetti's apparatus, to produce perspiration. To convalescing patients the use of iron is beneficial. The bisulphites have been recommended, but from experience they cannot be advocated. Belladonna is not always a prophylactic, although on account of its innocence, and a feeling of satisfaction to the practitioner and family, it is well to administer it.—*Medical Record*.

ACTION OF ALCOHOL.—In his Lectures on the Treatment of Fever, Dr. Lionel S. Beale gives the following summary of the local and general action of alcohol:

"1. In external wounds and in internal diseases where alcohol acts beneficially, the good result is, in part at least, due to the alcohol checking the *increased action* already established.

"2. Alcohol does not act as a food; it does not nourish tissues. It may diminish waste by altering the consistence and chemical properties of fluids and solids. It cuts short the life of rapidly growing bioplasm, or causes it to live more slowly, and thus tends to cause a diseased texture, in which vital changes are abnormally active, to return to its normal and much less active condition.

"3. In 'exhausting' diseases, alcohol seems to act partly by diminishing very rapidly the abnormally increased growth of

bioplasm. The quantity required will depend upon the extent to which the changes alluded to have proceeded. In extreme cases, half an ounce of brandy, or even more, may be given for a time (in some cases even for several days) every half hour; and there is reason to believe that in desperate cases, life is sometimes saved by this treatment.

“Practical Conclusions.—Lastly, I shall venture to repeat here the conclusions I arrived at many years ago concerning the great value of the alcoholic treatment of low fevers and inflammations. Increased experience has afforded further confirmation of the correctness of the statements made in the paragraphs below. I do not, of course, refer to slight cases of fever, pneumonia, &c., in which no stimulant whatever may be required, but to very severe cases of disease only.

“1. In what appeared hopeless cases, as much brandy as the patient could be made to swallow (an ounce and a half to two ounces in an hour) has been given for several hours in succession, and then as much as thirty ounces a day for several days, not only without producing the slightest intoxication, vomiting or headache, but the treatment has been followed by recovery.

“2. I would adduce the fact that a man not accustomed to drink, when suffering from acute rheumatism, complicated with pericarditis with effusion, pneumonia at the base of one lung, and pleurisy on the opposite side, has taken twenty-four ounces of brandy a day for eleven days, the tongue being moist and the mind calm during the whole time. While under this treatment, inflammatory products were absorbed, and the general state of the patient much improved.

“3. I have been compelled to give a very weak child, weighing less than four stone, twelve ounces of brandy a day for ten days, while suffering from acute rheumatism, with pericarditis and effusion. This quantity did not produce the slightest tendency to intoxication, or exert other than a favorable effect upon the disease. The patient did not begin to improve until the quantity of brandy, gradually increased, had reached the amount stated.

“4. I would state that among the general conclusions I have reached, after carefully watching more than one hundred cases of acute disease treated with large quantities of stimulants, are the following: That intoxication is not produced; that delirium, if it has

occurred, ceases, or is prevented from occurring at all in the course of the case; that headache is not occasioned; that the action of the skin, kidneys and bowels goes on freely; that the tongue remains moist, or, if dry and brown, often becomes moist; that the pulse falls in frequency and increases in force; that respiration is not impeded, but that, where even one entire lung is hepatized, the distress of breathing is not increased, and it appears that the respiratory changes go on under the disadvantageous circumstances present as well as if no alcohol had been given.

“The conclusion from all this is, most certainly, that alcohol does not do harm in fevers and acute inflammations; that it does not produce intoxication in persons suffering from exhausting diseases, and that large quantities (from twelve to thirty ounces) may be given in cases which appear very unlikely to recover, and sometimes the patient will be saved. The conviction is forced upon the observer that, in desperate cases, these large quantities of alcohol are directly instrumental in saving life, not by *exciting or stimulating to increased action*, but by *moderating actions already excessive*, and at the same time by causing the heart to contract more vigorously, and so continue to drive the blood through the impeded capillaries.”—*Med. Times and Gazette*.

MEDULLARY CANCER CURED BY THE ARSENICAL MUCILAGE TREATMENT.

The following is a good example of the kind of cases for which the arsenical mucilage treatment, introduced by Dr. MARSDEN, Surgeon to the Cancer Hospital, is most preferred. The tumour being a medullary cancer of comparatively small size, situated on the exterior of the body, and not penetrating deeply into the tissues at its base, all the conditions as to nature, size, situation, and connections, combined to favour the use of the remedy, and the result was as successful as could be desired.

The tumour grew from the skin over the trapezius muscle near its anterior edge, about midway between the head and shoulder. It was quite circular at its base, with a diameter of nearly an inch, and rose about three-quarters of an inch above the level of the skin at its highest point in the centre—closely resembling, in fact, a large

strawberry in size and shape, as well as in colour, the whole surface having a red fleshy appearance, cut up by fissures of various depths, and thickly covered by large round granulations. It was so closely encircled by skin, that it overlapped a little at the edges; the skin, however, around the base was not otherwise perceptibly altered except in colour, there being here simply an areola two or three lines in breadth, of a purplish hue, in the direction of which the veins were visibly increased and enlarged. It bled on the slightest touch, and, being extremely sensitive, was the source of constant pain. The history of the case showed that, about three years before, a small tumour appeared at the site of the present one, and, on being lanced, discharged blood freely. It continued to bleed more or less occasionally until the wound closed, when, in consequence of its increase and the pain arising from it, it was excised; soon afterwards it reformed, and was again excised, but still kept on growing; and, at the time of the patient's admission into the hospital, on February 22, 1872, presented the characters described. The patient was a moderately healthy woman, 41 years of age.

As the patient was in tolerably good health, there was no occasion for delay on that ground; and accordingly, on February 23, the arsenical paste (consisting of arsenious acid and mucilage of acacia, in the proportion of two drachms of the acid to one drachm of the mucilage, made into a thick paste) was laid over the whole surface of the tumour, and covered with cuttings of lint in the usual way. In three days, the diseased mass was quite movable, and a sulcus lay between it and the skin, leaving it attached only at a small portion of the base. Bread-and-water-poultices were then applied and changed every three or four hours; and on the fourth day (February 27) the whole mass came away in a lump, leaving in place of the tumour a conical cavity with slightly indurated edges. The wound was poulticed in the same way as before for a few days, and then dressed with weak spirit lotion. Healthy granulations sprung up over the whole surface of the cavity, and by the 23d of March its size was reduced to about a third, and the induration of the edges was much less. On April 9, the wound was quite healed, the induration had entirely disappeared, and the only indication of the former disease left was the cicatrix and an increased vascularity of the skin around it. The patient remains quite well up to the present date (October 8).

Another case with a tumour, as near as possible in resemblance to the above, situated on the chest near the middle line immediately above the breast, is at present in the hospital under the care of Mr. Porter, for which the same method of treatment is being employed. This patient is a feeble old woman, 70 years of age, and has had the paste twice applied; the first application, although it appeared to remove the whole of the disease, being followed by a slight return of the growth when the wound was nearly healed. It is now, after the second application, progressing favourably, without any symptom of a return of the disease. Dr. Crombie, the house surgeon, remarks that, during his residence at the hospital, he has seen other cases of recovery by this treatment continuing well at considerable intervals afterwards, although in one instance the disease removed from the cheek had appeared on the tongue about three years afterwards.—*Brit. Med. Journal*, Nov. 2, 1872.

PERINEAL LACERATIONS.—Joseph G. Swayne, M. D., Physician Accoucheur to the Bristol General Hospital, says of partial lacerations of the perineum, that they are very common. In four hundred cases of labor attended by himself, there was one case of complete laceration, and thirty-one cases of partial, twenty-five of which occurred, as might naturally be expected, in primiparæ, and six in multiparæ. Now as there were one hundred and one primiparæ in the four hundred cases, it follows that, in about a quarter of these, partial laceration of the perineum took place. Such a result may at first appear startling; but I do not think it would surprise any one who is in the habit of making frequent examinations with the speculum; for it is remarkable how often one discovers the evidences of rather severe lacerations. Yet these occurrences, although so common, are very apt to be overlooked on account of the delicacy of the patient, and because there are no urgent symptoms to direct attention to them.

Although they give rise to no grave or urgent symptoms, yet they occasion minor inconveniences of different kinds, which it is just as well to prevent if possible. For instance it is very common to find a woman complaining of great soreness of the vulva for two or three weeks after delivery, and on examination a laceration is discovered.

ration is found, which still continues in an unhealthy, irritable condition.

When a sore of this kind heals after several dressings, and applications of caustic, no union of the torn edges takes place, but the perineum still remains in an incomplete condition. The result is, that an uncomfortable feeling of want of support is left; the parts remain open, and there is a predisposition to prolapse of the uterus and vaginal walls. As regards the prevention of this accident, my experience leads me to endorse all that has been brought forward by various authors in proof of the inefficiency of support for the prevention of laceration. I have supported the perineum in many cases where rupture appeared imminent, and in many others of a similar character I have left that part without support; and the result from both plans has appeared to be much the same. There is seldom any great danger of rupture until the head is protruded so far that the accoucheur can grasp the exposed portion with his thumb and fingers. When this can be done, the best plan is to press the head forward as much as possible under the pubic arch, so as to prevent the *vis a tergo* from acting so directly downward upon the perineum. When there is any reason to apprehend laceration, it is always as well to have the part in view, so as to be able to give this kind of assistance at the right time. This can be managed so that the patient is scarcely conscious of any exposure. When in attendance on a primipara I generally, if possible, thus see what is going on, so that I can observe the nature and degree of the rupture just at the time when it takes place, and be able to treat it without loss of time.—*British Medical Journal*.

ON THE EMPLOYMENT OF CREASOTE IN DEAFNESS.—One of the principal causes of deafness is the absence of the secretion of cerumen in consequence of a fault in the action of the ceruminous glands. Often in my clinics, even when the deafness has continued for a long time, I have observed that it has no other cause, and on removing that, I have caused the infirmity to disappear. It is very true that to obtain this result, more or less time is necessary, according to the duration of the infirmity, and in proportion to the gravity of the first cause of the inaction of the glands. After having cleansed

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TORONTO, FEBRUARY 1, 1873.

DEATH OF NAPOLEON.

For several years past the Ex-Emperor of France has exhibited symptoms which awakened suspicion of vesical disease. He is also said to have been a sufferer from rheumatism. In the year 1870, it is alleged that he consulted some of the leading French Surgeons in regard to his health, and that they diagnosed the presence of a calculus, and advised an immediate operation; but from political considerations the matter was hushed up. During the late war his sufferings are said to have been very great, but from the comparative quiet and rest which he enjoyed after the fall of Sedan, the symptoms abated, and for some time he suffered but little. During the past year he became much worse. His medical advisers, Dr. Le Baron, Corvisart, and Conneau, both concurred in the opinion that calculus of the bladder was the cause of his trouble. Sir Henry Thompson and Dr. Gull were called in some time in July. Sir Henry at that consultation examined the prostate gland, which he pronounced healthy. He desired to examine the bladder, but his Majesty declined at that time, and subsequently went to the South Coast for a short time. On his return he consulted Sir James Paget, who advised that an examination of the bladder should be made, and the question of the presence of a calculus definitely decided. About the end of December, Sir Henry Thompson was again sent for. He

unhesitatingly advised an immediate examination of the bladder under chloroform. On introducing the sound, he at once detected a large calculus. He then introduced a lithotrite, and measured it. The stone was thought to be about the size of a walnut, and phosphatic. The urine on examination proved to be alkaline, was thick and cloudy; crystals of triple phosphate, blood, pus, and mucus, were also present. After consultation, it was decided to attempt to crush the stone. Accordingly, on the 3rd of January, Sir Henry, in the presence of his Majesty's medical advisers, introduced the lithotrite, and crushed the stone freely, and removed several fragments. During the next two or three days there was a good deal of pain and frequency of micturition, and it was decided to operate again on the 6th, at 10 a.m., in order to remove any irritating fragments. Owing to the occurrence of a rigor, a circumstance of common occurrence to his Majesty, the operation was postponed for two hours. On the introduction of the lithotrite a fragment was found imbedded in the prostatic portion of the urethra, and was with difficulty overcome. The operation was then performed, and several fragments removed. A third operation was arranged for on the 9th, at noon, but at 10.25 he was found to be suddenly sinking. He became unconscious; the pulse, which had previously been about 80, rapidly fell, and he sank. The following is the result of the *post mortem*, which we take from the *British Medical Journal* :—

“The disease of the kidneys was of two kinds—there was, on the one hand, dilatation of both ureters and of the pelvis of both kidneys; on the left side the dilatation was excessive, and had given rise to atrophy of the glandular substance of the organ; on the other, there was subacute inflammation of the uriniferous tubes, which was of more recent origin. The parts in the neighbourhood of the bladder were in a healthy state; the mucous membrane of the bladder and prostatic urethra exhibited the signs of subacute inflammation, but not the slightest indication of injury. In the interior of the bladder was found a part of a calculus, the form of which indicated that half had been removed. Besides this there were two or three extremely small fragments, none of them larger than a hempseed. This half calculus weighed about three-quarters of an ounce, and measured $1\frac{1}{4}$ inch by 15-16ths of an inch.

“There was no disease of the heart, nor of any other organ, excepting of the kidneys. The brain and its membranes were in a

perfectly natural state. The blood was generally liquid, and contained only a very few small clots. No traces of obstruction by coagula could be found either in the venous system, in the heart, or in the pulmonary artery. Death took place by the failure of the circulation, and was attributable to the general constitutional state of the patient.

“The disease of the kidneys, of which this state was the expression, was of such a nature and so advanced that it would, in any case have shortly determined a fatal result.”

NURSING THE SICK POOR.

The editor of the *Northwestern Med. and Surgical Journal* in discussing this subject makes use of the following language: The poor can always secure medical attention; but they cannot live on powders and boluses, however indispensable. In addition in our climate, at this season, four other things are absolutely essential; warm clothing, abundant fuel, suitable food, and proper nursing and attention. The clothing and fuel can be easily supplied by money, and this can usually be obtained from the authorities, or from charitable associations. More difficult to supply are properly prepared food, and nursing. Evidently it is no part of the physician's duty, while his time and services are given, to supply these also, any more than he should cart wood to his patients, or make them blankets.

Charitable ladies can usually be found in cases of necessity to carry such food as directed; all thanks for what they are so ready to do; but their efforts are spasmodic, and not to be depended upon; moreover, their best done, the question of nursing can not at all be met in this way. The Poor Commissioners are generally found ready to supply food, but not nurses, and the food they give has the disadvantage over that brought by the ladies, that it is crude, and, ten chances to one, there is nobody in the house to prepare it fit for the stomach of a dog.

He suggests some systematic organization regarding which he says, “We are not now speaking of a sinecure, a sisterhood, or a Young Women's Christian Association, the members of which meet once a week, and after an afternoon's discussion of their neighbors'

shortcomings and clothes, conclude that the poor are warmed and fed, and adjourn to their next stated meeting. We mean an organization of those who are willing to work ; those who will pledge themselves that when called upon they are ready to watch by the bedside of the meanest pauper. A few such women, if they could be found, would be worth untold money ; a few, if devoted to their work, would suffice. A half dozen in a town of twenty thousand inhabitants could do all that is necessary except in unusually sickly periods. It is fortunate that not many are needed, for there are doubtless really very few with whom such a course of life would be practicable.

We are not speaking of a thing which has never been tried ; in London certain ladies have served as nurses in the hospitals a short time each, in order to acquaint themselves with efficient modes of nursing, and on coming out, have banded themselves together, pledging themselves as obedient to any call of need, as received from physicians. The system has been found to work admirably. Our towns are not too small nor our population too sparse too feel the need of like organizations ; the hospitals for training are wanting, but every physician will be ready to instruct in such details as are not generally understood. Ladies to enter into it must be possessed of means enough to support them, and and have their heart in the work ; of course, too, they must be free from the cares of a husband and family.

As to the desirability of hospitals open to all who present the two conditions of sickness and poverty, no argument is needed ; those who are able to pay for their care in charity hospitals, doubtless should, but too often *money* is the prerequisite for admission to those institutions which claim to be for the benefit of the *poor*.

QUACKERY UPHELD.—We have received the following communication from a person who calls himself Dr. Granger, which we publish in full together with the enclosed testimonial from the medical men of Whitby, which the “learned” Dr. publishes at the head of a flaming, full-sized poster. We are acquainted with some of the medical men whose signatures are printed below, and we do not believe for one moment they would have allowed their names to appear if they had known what use was to be made of the docu-

ment. They must have known, however, that the "learned" blacksmith has been quacking these many years, and that the document would be used privately by him to further his own interests and mislead the unwary, and therefore they cannot be relieved from all responsibility in the matter. We feel very much flattered by his kind reference to the *Lancet*, and his offer to "help it to spread," but would most respectfully decline the proffered assistance :

DUNBARTON, Jan. 23rd, 1873.

To Dr. Fulton, Editor of the *LANCET*.

DEAR SIR,—I received the *Lancet* in due time, and would have written you before, but have been disabled by a fellon on my finger, and even now can hardly hold my pen. I have enclosed 25 cts. and two stamps, which will pay you for this copy, and as soon as I become settled I will become a subscriber. I noticed an attack upon me by a neighbour of mine who sines his name "Live and Let Live." A part of his statements is true, and part is not true, but I suppose he gave them to you as he received them from others the names I have inclosed will show you what the faculty thinks of me in Whitby the most of them have none me and my practice for more than twenty-five years. The act provides that any one that has been in practice since 1850 can get licence by paying the fees I have paid in the fees to Dr. Strange, the register in Hamilton, and expect my licence every day, with great respect.

DR. J. GRANGER.

P. S. I intend going west in a short time. I think very highly of your journal, and will do all in my power to help it to spread.

J. G.

TESTIMONIAL.

We, the Undersigned Physicians, of the Township of Whitby, County of Ontario, having been well acquainted with Dr. J. Granger, of Brooklin, for many years, do consider him a man of good moral character, and well worthy of public patronage.

J. FOOT, M. D., HENRY WARREN, M. D., W. H. EVANS, M. D.,
W. MCGILL, " " G. A. CARSON, " " R. J. GUNN, " "

TORONTO HOSPITAL.

The late appointment of a medical officer on the staff by the Trustees of the Toronto General Hospital, has awakened strong suspicion in the minds of many who were formerly their friends, that all is not right. The more this subject is looked into the more apparent the injustice of their action becomes. By what means they can justify their course before the public we are at a loss to conjecture. They cannot plead ignorance as to the position and standing of the various applicants, for the whole facts were before them. They cannot pretend to have desired an equality of representation in the Schools, neither can they pretend to have repudiated the Schools altogether—for they have appointed a man who is a lecturer in one of the Schools, and have thereby given that School a preponderance on the staff, which is manifestly unjust to the other Schools. They cannot pretend to have selected the best man available, for they have appointed a young man who has been in practice a little over a year, and this over the heads of men equally well qualified to say the least, and who have been in practice ten, fifteen, and twenty years. If, then, all this be true, and true it is, it must have been solely from mere personal considerations; and if they are guided by personal considerations in the appointment of a public officer, we may reasonably enough infer that this is not the only matter which has been subordinated to purely personal considerations. This action of the Trustees can not be allowed to pass unchallenged, and shall not, while there is a just and discerning public to appeal to, or an impartial government to memorialize. It is not a mere personal matter, but one which affects the whole body corporate of both Trinity and Victoria College, as well as the public, and no idle words are to be spent over it. The earnestness with which this matter has been taken up by those more immediately concerned, shows how keenly they feel the injustice which has been done them in this appointment. The unwise and arbitrary conduct of the Trustees in reference to this matter has already added much to the feeling of distrust which has occupied the public mind regarding the management of this trust, and will undoubtedly militate much against their successful operations in the future. This is on many accounts much to be regretted, but we cannot allow any feeling of false delicacy or maudling sympathy to prevent us from speaking out in the discharge of our duty to the profession and the public.

DEATH FROM CHLORAL HYDRATE.

It is our painful duty to announce the death of Dr. C. B. Jones, of this city, on the 15th ult., from Chloral Hydrate.

The Dr. had been suffering for some time past from fissure of the anus, and he placed himself under the care of Dr. Campbell and Son, of Toronto, for treatment. He was put under the influence of chloroform and the operation performed. He recovered nicely from the effects of the chloroform, but as he was still suffering considerable pain, he requested Dr. Campbell to give him some chloral, which he accordingly did. He took 40 grs., and in about 20 minutes 40 grs. more combined with $\frac{1}{4}$ of a grain of morphine, were administered; soon after he became insensible, and sank, in spite of the usual appliances, death being caused by cardiac syncope. This is the second occurrence of the kind which has taken place in this city, and as a curious coincidence in both cases from similar quantities of chloral. We do not wish to lay blame at any man's door, but we cannot refrain from remarking that it is exceedingly unwise to administer chloral hydrate after an operation in which chloroform or ether has been used under any circumstance.

CANADIAN GRADUATES ABROAD.

The Canadian graduates in Medicine who are at present in London prosecuting their studies, held a dinner at the "London," Temple Bar, on Friday, the 19th of December, 1872. The following gentlemen were present:—

A. A. Brown, M.D., Montréal; F. Buller, M.D., M.R.C.S., England, Cobourgh, Ont.; W. L. Copland, M.D., St. Catharines, Ont.; W. B. Lindsay, M.D., Mt. Brydges, Ont.; W. E. Ledyard, M.B., M.R.C.S., Toronto, Ont.; C. W. Marlatt, M.B., M.R.C.S., England, Yarmouth, Ont.; J. MacMonagle, M.D., M.R.C.S., F.O.S., London, St. Johns, New Brunswick; A. A. McDonald, M.B., Guelph, Ont.; Wm. Osler, M.D., Dundas, Ont.; Alexander Scott, M.D., L.R.C.S., L.R.C.P., Ed., West McGillivray, Ont.; L. St. John, M.D., St. Catharines, Ont.; G. N. Whelan, M.D., Newfoundland; R. Zimmerman, M.B., Toronto, Ont.

Toast, song, and sentiment followed the entertainment, and a pleasant time was experienced by all present, and one long to be remembered. This is the first affair of the kind ever held in the capital of the British Empire.

MEDICAL ACT AMENDMENTS.

We have delayed the publication of the *Lancet* of the present month for a few days, in the hope of being able to publish the proposed amendments to the Ontario Medical Act, but at the last moment have been obliged to go to press without them. We have seen the rude draft of the Bill, however, and are therefore in a position to discuss its principal features. In addition to some unimportant details in the working of the Council, which the Bill is intended to rectify, it contains two alterations which are of material importance to the whole profession in Ontario. The first is the making of the "penal clauses" effective, and the second is the Annual renewing of the privilege of practising.

Of the first we need say no more than that it is in compliance with the often repeated and urgent request of the profession, that the change in the penal clauses has been made. The second requires more explanation.

It has hitherto been too much the case that after a young man received his qualifications to practice, he settled down possibly in some remote place, and had to fight the battle of life unaided and uncheered by any feeling of brotherhood with the profession to which he belonged. The formidable powers for redressing their wrongs which "unions" have given to many branches of trade, furnish us with a lesson from which we should profit, of the benefits of co-operation.

Now it is hoped that the effect of the annual renewing of his connection with the rest of the College will lead to the "College" being felt to be a living reality; and that the Council as a focal point will be a central authority, to which every member will be ready to appeal if his rights are invaded. It is also proposed as soon as practicable, to found a library and museum, donations and contributions to these will be thankfully received and acknowledged.

The fee is put as low as possible to avoid any dissatisfaction on the point of "taxation;" and it is purposed to reduce it materially by sending free of all expense to every member a copy of the Medical Register, in each year, together with copies of all the other papers published by the Council which will be of interest to the profession.

It is intended that the fee, which is placed at \$2 a year, shall

be payable on the 1st of April, this year ; in other years, on the 1st of January ; and, as a means of securing prompt remittance, it will be enacted that, if this fee is not paid previous to the 1st of June in this or in any subsequent year, the name of the member omitting to pay it shall not appear in the Register for the year ; it is intended that the Register shall be published every year, on the 1st of July ; and, any one whose name is thus left out can only be reinstated by a payment of all arrears, and by paying a fee to the Registrar equal to that charged for the registration of additional qualifications—viz., \$2.

It is also intended that hereafter the registration fee shall be Twenty dollars instead of Ten, thereby assimilating it more to the rate charged in England, which is £5 sterling ; power is however to be given to the Council to make any abatement it may deem expedient from this rate in special cases.

We are requested to state, that any suggestions which any member may wish to make bearing upon any of the points above referred to, or any other matter connected with the Medical Bill, may be addressed to Dr. Pyne, Registrar, College of Physicians and Surgeons of Ontario, Toronto. At the same time we are requested to inform members that, while their suggestions will receive due and respectful consideration, it will be impossible to answer their letters.

ACTION FOR MALPRACTICE.

At the winter assizes for the County of York an action for malpractice was brought against Dr. Newcombe, by Mr. Butt of this city. The cause of action was in reference to a case of fracture of the neck of the femur in a person 55 years of age, which was treated by Dr. Newcombe, and in which there was said to be from 1 inch to 1½ inches of shortening. The fracture was treated upon a double inclined plane.

Drs. Aikins, Hodder, Philbrick, Winstanley, and Canniff, who gave evidence in the case, all testified to the fact that shortening always occurred in such cases. The plaintiff was nonsuited.

PLEASE EXPLAIN.—We have just received a copy of the *Lancet* re-addressed to this office, with a note enclosed stating that the sender is in receipt of two copies. The note is not signed, neither is the address given, and it is of course impossible for us to correct the mistake. We would feel much obliged if the party would send a post card giving these particulars. We occasionally receive copies of the *Lancet* returned in the same way without any signature or explanation of any kind, and the same parties subsequently claim that they have returned certain copies, but that we continue to send the Journal to them.

NOTES AND COMMENTS.

TREATMENT OF ASTHMA.—In Braithwaite's retrospects we find the following remarks in reference to the treatment of this disease : Asthma should, with a view to its successful treatment, be viewed as a neurosis of the pneumogastric nerve, of which, sometimes, the cause is disturbance of healthy function at the brain end, and sometimes at the gastric or hepatic. Thus bismuth and hydrocyanic acid are of great value when the neurosis is of gastric origin. Carlsbad salt, nitric acid, and at times, small doses of mercury, are all unmistakably curative when the hepatic system requires relief. Other remedies, such as ipecacuanha, belladonna, and nux vomica, are of use in appropriate forms of pneumogastric disturbance ; whilst iodide of potassium, sulphur, and arsenic, are the remedies indicated if there is a gouty or rheumatic diathesis at the root of the malady.

COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.—The following candidates for matriculation passed their examinations successfully before A. McMurchy, M. A., Council's Examiner, Toronto, viz :—G. S. McGeough, Henry J. Reynolds, George A. Rutledge, William Franklin Strangways, A. Brewster, R. J. Bently, and John Golden.

HONORS.—Dr. Dorland of Belleville, who has been absent in England, has lately returned after having successfully passed the examination for membership in the Royal College of Physicians and the Licence of the College of Surgeons, Edinburgh.

ALCOHOL AND RENAL DISEASE.—It seems probable from discussions which have taken place lately in the *London Lancet* and other British Journals, that the profession has been in error in regarding the immoderate use of alcoholic drink as tending to produce kidney disease. Dr. Dickinson has been at considerable pains to collect statistical information on this point; he has also looked into the whole subject very closely, and has arrived at the conclusion that, drinking habits are not, on the whole, great contributors to the general mortality from kidney disease. This view is diametrically opposed to a wide spread medical belief, and one which is sure to meet with considerable opposition. It is a well known physiological fact that only a small quantity of the alcohol taken into the system is eliminated by the kidneys. It cannot be therefore, that the cells of the uriniferous tubes are overtaxed in the elimination of alcohol. Besides, it has never been proved either by clinical observation or by statistical evidence, that there is any decided tendency of alcohol excess to produce kidney disease. The subject is a very important one, and requires careful investigation.

CASE OF GASTROTOMY.—Dr. Troup, *Edin. Med. Journal*, July, 1872, describes a case in which gastrotomy was resorted to in a case of impermeable stricture of the oesophagus. He was assisted by Dr. David Lyell, of Newburgh, and Dr. John Lyell, of Glasgow. The patient was at the point of starvation and suffering from intense thirst, and begged to have the operation performed. A vertical incision was made to the left of the median line over the region of the stomach and a tracheotomy tube inserted, the margin of the opening in the stomach being stitched to the parietes of the abdomen. Milk and stimulants were by this means readily passed into the stomach and the three remaining days of the man's life were spent in comparative comfort. A *post mortem* examination revealed the presence of a large epitheliomatous mass, at the cardiac end of the stomach.

AMPUTATION IN TETANUS.—Dr. Hackney (*Lancet*) reports a case of traumatic tetanus, in which amputation of the bruised finger was resorted to for the cure of the disease. The top of the middle finger was crushed in a door, and about 30 hours after the accident tetanus set in. The operation was attended with success, and although amputation is not generally considered justifiable in such cases, it seems to have been highly satisfactory in this instance.

ELECTRICITY AS A MEANS OF RESUSCITATION.—Allan McLane Hamilton, M. D., of New York (*Am. Practitioner*, Oct., 1872), says : 1st. That it is useless to expect good results if five minutes have elapsed since life appears extinct. 2d. That the current should be applied faithfully and steadily, one pole being placed on the ensiform cartilage, the other on the base of the skull or over the tracks of the great nerves of the neck. 3d. That the faradic and interrupted galvanic currents are the best. 4th. That the current should be applied some time after respiratory movements have become regular.

In conclusion the writer says : The necessity of having a battery within reach is apparent. Every practitioner should have a small one for emergencies. They should be kept at each life-saving station on the coast, ready charged, with directions for immediate use. If this were done, he doubts if the percentage of deaths would be so great as it now is. Artificial respiration by the production of muscular movements is a very valuable means of restoration ; but a force that acts directly upon the nerves supplying the muscles of respiration, is by far the surest and best.

MEDICAL EDUCATION OF WOMEN.—It appears that the medical education of women will shortly be placed on a solid foundation in Boston, by the New England Female Medical College being made a branch of Harvard University. The Female Medical College takes a dower with it of \$150,000, and its endowment will be kept exclusively for female students, but in all respects beyond that of working in a separate College building, the female students will be dealt with by the University on precisely the same footing as male students. There will be equal terms, a "fair field," and no favor.

EXCISION OF THE PROXIMAL PHALANX OF THE THUMB.—Dr. Bell in the *London Lancet*, reports a case of excision of the first phalanx of the thumb for enchondroma. No tendons were cut, and and none of the soft tissues removed, the phalanx being removed by keeping close to the bone. The distal phalanx was brought to the metacarpal bone and retained by bandages and appliances. The redundancy of integument and tissue disappeared in a short time, and a tolerably useful thumb secured. The movements at the joint are good.

THE WARM BATH IN SMALL-POX.—Dr. Stokes, Regius Professor of Physic in the University of Dublin, (*Dublin Journal of Medical Sciences*, for January 1872,) recommends the use of the warm bath in the treatment of small-pox. He says: "We cannot doubt that the mortality in small-pox hospitals would be greatly diminished by the use of the bath. After describing a very severe case of confluent small-pox, in which the patient is kept alive only by stimulants, he said the trial of the warm bath was suggested to him by Mr. Smyly. "The effect was instantaneous and marvellous. The delirium ceased as if by magic. It was the delirium of pain; and the patient exclaimed: 'Thank God! thank God! I am in heaven! I am in heaven! Why didn't you do this before?' The fetor immediately and completely disappeared, so that, on entering the ward, no one could suppose that there was a case of small-pox in it. He was kept at least seven hours in the bath."

APPOINTMENT OF CORONERS.—JOHN PRICE BROWN, of the Town of Galt, Esquire, M. D., to be an Associate Coroner within and for the County of Waterloo.

JOSEPH PRIESTMAN, jr., of the Village of Humberstone, Esquire, to be an Associate Coroner within and for the County of Welland.

CANADIAN INSTITUTE—MEDICAL SECTION, TORONTO.

Ordinary Weekly Meeting, Jan. 10th, 1873.

Dr. Coleman, the convener of the Committee on Medical Tariff, submitted for consideration the scale of fees recently adopted by the Hamilton Medical Society. A short discussion followed.

The newly-elected Chairman, Dr. C. B. Hall, then delivered the Annual Address. He alluded to the beneficial influence already exerted by the Section in directing the current of Medical opinion; and, after a passing notice of some of the recent advances in Medicine, he touched upon various other topics, that seemed to him worthy of the attention of the members.

Remarks were made by Drs. Rosebrugh, W. W. Ogden, Fulton and Oldright, on some of the points alluded to by the Chairman, and the thanks of the meeting were then voted to the latter for his suggestive address.

Friday, January 17th, 1873.

Dr. N. Agnew read "A Sketch of the History of the Medical Profession," which was replete with interesting information, clothed in an attractive garb. A vote of thanks was unanimously accorded to Dr. Agnew for his admirable paper.

Dr. Coleman presented the Report of the Committee on Medical Tariff. After some discussion, it was decided to have 150 copies printed for distribution amongst the Medical men of the city, so as to afford every one an opportunity of fully considering its various items, and it was understood that a public meeting of the profession would soon be called to consider and revise the 'proof' circulated, and to decide upon a tariff by which it would agree to abide.

It was announced that at the next meeting Dr. A. D. Williams would read a paper on "Chloral Hydrate."

BOOK NOTICES.

THE PATHOLOGY, DIAGNOSIS AND TREATMENT OF DISEASES OF WOMEN, INCLUDING THE DIAGNOSIS OF PREGNANCY. By Graily Hewitt, M.D. Lon. and F.R.C.P.; Second American from the third London Edition, Revised and Enlarged. Philadelphia: Lindsay & Blakiston; Toronto: Copp, Clark & Co. Price: Cloth, \$5.00; Sheep, \$6.00.

This treatise is already long and favorably known to the American profession. It forms a volume of 740 pages, numerouslly illustrated, and though called a new edition, it is really a new work. As regards the present edition, the author states in his preface that "It contains certain generalizations on the important questions of the pathology of diseases of the uterus, which have forced themselves on his attention in the course of several years' experience, and which involve the adoption of views in reference to the pathology and treatment of the diseases of the uterus which are new as compared with those embodied in the early editions of this work."

The mechanical theory of uterine pathology now put forward is not, the author claims, a merely speculative one. "If I had published it," he says, "when I first conceived it some years ago, it would have been a speculation only; but the system as now enunciated

ated commends itself to my judgment as true, inasmuch as I have found it in conformity with daily observations for five or six years past. In support of these doctrines I have thought it expedient to embody the series of observations made by myself on the subject of the Diseases of Women at University College Hospital, during a period of over four years. These observations impart a clinical character to the work, which may be useful from other points of view."

He at first treats of the natural history and general pathology of the female sexual organs. He next gives a detailed description of the signs of pregnancy, and the means of diagnosing it from tumors of the abdomen. Considerable space is devoted to the discussion of the various flexions and displacements of the uterus and their treatment. Disorders of menstruation, diseases of the uterus, ovaries and external organs are fully treated of. The style is attractive and practical, the mechanical execution of the work creditable, and as a reliable guide in the treatment of diseases peculiar to women, it has no superior.

The British Medical Directory for 1873, and General Medical Register, London: J. A. Churchill. Price 10s. 6d.

The above is an octavo volume of upwards of 1100 pages, and comprises a London and Provincial Medical Directory; the Medical Directory for Scotland and Ireland; a Medical Directory of practitioners resident abroad, possessing British qualifications, with a medical directory of the army, navy, and mercantile marine; also statistical and general information respecting the Universities, Colleges, Hospitals, Societies, &c., in the United Kingdom. It is an exceedingly useful work and contains a vast amount of valuable information, and at an exceedingly low price. Great pains have been taken to render the list of practitioners resident abroad possessing British qualifications complete. We notice, however, that a few names are omitted, which we hope will be supplied in the next edition.

NEW AND ORIGINAL THEORY ON CHOLERA, by P. V. Dorland, M. D., M. R. C. P., L. R. C. S., Edinburgh, London: Williams & Strahan.

The author does not believe in the existence of any specific cholera poison, and attributes the occurrence of the disease to two

conditions. 1st. The presence of poisonous matter in the atmosphere, the result of the decomposition of animal and vegetable substances, and 2nd. An absence of ozone. This poisonous matter he asserts is always present, and is the same which produces typhoid, typhus, intermittent, and remittent fevers; but under such circumstances, it is modified by the presence of ozone. When the latter substance is absent the poison acts with its full force on the system and produces those symptoms characteristic of cholera.

FETICIDE OR CRIMINAL ABORTION. A lecture introductory to the course of Obstetrics and Diseases of Women and Children, University of Pennsylvania, by Hugh L. Hodge, M.D. Fourth edition. Pp., 55. Philadelphia: Lindsay & Blakiston. Toronto: Copp, Clark & Co. 1872. Price 10 cents; in leather, 60 cents.

The author shows that from the moment of conception, the foetus is a human being, from which follows the logical conclusion that its wanton destruction, at any moment prior to birth, is as much murder as at any time after birth. He says that that system of medical instruction which does not thus instruct its students in reference to the hideousness of this crime, is far behind the views of our best modern physiologists. Efforts have been made in many quarters to instruct the people upon this subject and much good has been the result, but still the awful crime prevails to an alarming extent. This little book should therefore be welcomed by every right-minded medical man.

In Quebec, on the 26th of December, 1872, GEORGE GOLDSTONE, M.D., M.R.C.S., Eng., aged 68.

Dr. Goldstone practised his profession for many years in Cobourg, and subsequently removed to Quebec, where he spent the remainder of his days. The immediate cause of his death was gout of the stomach.

At his residence 111 Church-st., on the 15th ult., CHARLES BLACKBURN JONES, Esq., M.D., aged 40 years.

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Original Communications.

HISTORY OF MEDICINE.

BY N. AGNEW, M.D., TORONTO.

Read before the Medical Section of the Canadian Institute, Jan. 17, 1873.

MR. PRESIDENT AND GENTLEMEN,—In an association of Medical men, it has occurred to me that it might be interesting to give a sketch—and the limits assigned to a single paper will only permit of a brief sketch—of the History of our Profession, its rise and progress the difficulties it has had to contend with, and the triumphs it has achieved.

“The ills that flesh is heir to” are almost co-existent with our race. As soon as the gates of Eden were closed behind the first rebellious pair, sorrow and suffering became the lot of man; and man’s ingenuity was taxed to mitigate the curse. The earliest attempts to relieve suffering, that we have any account of, were in the department of Surgery. By the application of leaves and ointments, and other medicated dressings, the Ancients, perhaps in pre-historic times, sought relief from suffering, and aided the healing process.

The practice of the healing Art, as a distinct Profession, carries us so far into the dim and misty regions of the past, that Esculapius,

its great founder, is believed by many to be a myth—the creation of the fancy of some heathen Poet, and the account of his parentage that has reached us favors such an hypothesis ; however, be this as it may, he was deified before the Trojan war, and, be he God or be he man, or a mere phantasm of the imagination, he claims us as his sons, and we are proud to acknowledge our relationship.

For long years, the founders of our Art, groped their way in ignorance and darkness. Heathens; they relied more on propitiating the gods than on medicaments, or surgical appliances. The body was early divided by the Egyptians, into thirty-six regions, each region presided over by a particular god, and much of the skill of the Physician depended upon his ability to propitiate the offended deity ; still considerable progress was made ; but, doubtless, much of the honor due to the skill of the Physician, was credited to other agencies—a habit of perverted vision that has come down to our own day.

In the armies of Agamemnon, about 1200 B.C., Surgeons were held in considerable repute, one of whom—Podalirius, one of the sons of Esculapius, received the most munificent fee ever presented to a medical man. Having been instrumental in saving the life of a Princess, he was rewarded with her hand, and a magnificent dowry—a stretch of generous appreciation which has never been repeated. May we indulge the hope that our beloved Queen may discover some knight of the scalpel, worthy the fair hand of her remaining daughter.

For several centuries after the Trojan war, there is no record of progress, and it is fair to assume that little, if any, was made. During the fierce wars of those early periods, fractures were frequently sustained ; yet there does not seem to have been any attempt at reduction. The aid of the gods was invoked, and, if deformity resulted, there was at least no chance for an action for mal-practice.

Three schools of medicine were founded by the descendants of Esculapius—the Asclepiades as they were called ; one at Rhodes, one at Cnisdos, and one at Cos. These are the earliest regular schools of which we have any record. The last, that of Cos, was the Alma Mater of the great Hippocrates. Hippocrates was co-temporary with, and a friend of Pythagoras, who founded a school at Crotona, about B.C. 600, and as he discarded the teachings to a great extent of the schools of the Asclepiades, and brought

Philosophy to bear on practice he had the proud distinction of first raising it to the dignity of a Science. But Hippocrates did more than all his predecessors and co-temporaries put together to advance the science. He was the first to reduce dislocations and fractures—he used the actual cautery and moxa—he used, and probably, invented, obstetric forceps ; and performed many of the capital operations. He performed paracentesis, having detected the presence of the fluid by percussion and auscultation, thus anticipating the discovery of the Stethoscope by Lænnec. Yet amid much truth there was much error—a ray of intense light had penetrated the Cimmerian gloom—the darkness was not dispelled.

At this time the study of Anatomy, by dissection was prohibited. To touch a dead body was considered profanation, both by Jew and Greek, and it is probable that all the knowledge of Anatomy which the Surgeons of that day had, was derived from the Egyptians, who practiced the art of embalming. It is, therefore, a matter of wonder, not that they know so little, but that they know so much.

For several hundred years after the time of Hippocrates, little progress was made, although Praxagoras, Plato and Aristotle added somewhat to the general stock of knowledge ; but ignorance and superstition still stood in the way of a decided forward movement.

After the death of Alexander the Great, however, Ptolemy Soter, who reigned B.C. 300, a more enlightened, at least a more liberal monarch than any of his predecessors, broke through popular prejudice, and permitted the examination of the dead human body, and under his powerful patronage and protection, Herophilus and Erasistratus, the two great heads of the Alexandrian school, first practised dissection, and thus had the high honor of inaugurating the only mode of instruction by which an accurate anatomical or physiological knowledge can be obtained. As might have been expected, rapid progress was now made. There was one great fault, however ; the surgery of their time was unnecessarily bold, as those distinguished men did not hesitate to lay open the abdominal cavity, and make direct applications to the liver and spleen—a course of treatment that modern surgeons would hardly like to adopt, or patients submit to, even with the lethal aid of chloroform. One of the pupils of the Alexandrian school was the first to arrest hemorrhage by the application of a ligature ; this he did, however, not

by applying it to the bleeding vessel, but to the limb ; but even this rude mode was a great step in advance of the barbarous practice previously in vogue in amputations, of dipping the stump into a vessel of boiling pitch. Lithotomy had previously been practised ; but several of the pupils of this school made it a specialty, and one of them, Ammonius, used an instrument of some sort by which he broke down stones in the bladder.

But now comes a dark period in the history of our profession. Julius Cæsar became virtual master of the world. The seat of learning was transferred from Alexandria to Rome, and the grand old Romans, notwithstanding their wonderful political economy, their shrewd sense and polished manners, were deadly foes to all who practised the healing art, and published repressive and cruel edicts against them. Under such treatment, it is no wonder that the art not only languished but retrograded.

In the early part of the first century of the Christian era, Celsus resumed the forward march. He was the first who recommended the ligation of wounded arteries ; so correct was much of his nosology, and treatment, that it would not be objected to in the present day. Another Roman physician, Arctæus, was the first to use vesicants as counter-irritants ; and for that purpose used cantharides. In the time of Celsus, dissection was prohibited under severe penalties ; but it is presumptive that he and his co-temporaries dissected the Simiæ—being the nearest approach to the human form to be found among the lower animals—as the great Galen did 150 years later.

Galen, the next great medical light, was born A.D. 131. He studied at Smyrna, Corinth and Alexandria. So brilliant was the genius of this truly great man, that his opinions and teachings were received as oracular, and proved a serious bar to advancement, paradoxical as it may seem, for it was generally believed that nothing could be added to his discoveries ; and his opinions and teachings moulded—almost ruled—medical thought for nearly 1,300 years. Yet his knowledge must have been very defective, for, as has been premised, his dissections were confined to the lower animals, chiefly of the Simian tribes ; and all that he knew directly of human anatomy, was what he learned from the examination of two human skeletons in the museum at Alexandria.

Shortly after the time of Galen, the world was enveloped in

barbaric ignorance and gloom, and much of what had been gained was again lost. The West was repeatedly invaded by the Huns, Goths and Lombards, and for four hundred years, or more, the medical world was enshrouded in this pitchy cloud, through which scarcely a ray of light struggled. The forward march was resumed by Actius, a pupil of the Alexandrian school, A.D. 550. At this time there were several famous schools in Arabia, but, as human dissection was prohibited by the Mahomedans, they did not advance beyond their co-temporaries of the European schools. It is noticeable, however, that Avicenna, an Arabian, who was born A.D. 980, was the first to introduce chemistry into medicine; and, although as we have seen, Hippocrates was the first who used obstetric forceps, Avicenna was the first who described them. The probang was invented by Albucasis in the 12th century. He was very fond of the use, or rather the abuse of the actual cautery, and excelled his predecessors in the roastings to which he subjected his unfortunate patients. The cautery, in those days, seems to have been used as unreasoningly as was the lancet fifty years ago.

About the middle of the twelfth century, surgery was separated from medicine by an edict of the Council of Tours—a dark day for surgery. At that time the practice of the healing art was almost exclusively in the hands of the priests; and as they were forbidden to shed blood, as was of necessity done in operations, the practice of surgery fell into the hands of the uneducated laity—the barbers, tinkers and cobblers of those days. Another period of darkness in the department of surgery was the inevitable result.

The study of anatomy had long been neglected. The teachers of those days were mere blind leaders of the blind—recourse was again had to charms and incantations, to unguents and plasters. The use of the ligature was neglected or forgotten, and the cautery was again resorted to, and, although the College of Surgeons was founded in Paris in A. D. 1271, little advance was made for nearly 300 years. The art of printing was discovered about 1450, and this most important art contributed greatly to the advancement of medical science. It was not, however, until the beginning of the sixteenth century, that a true revival of scientific knowledge began; and the study of anatomy, inaugurated by Herophilus and Erasistratus many hundred years before, was resumed as the only basis of correct medical knowledge. As might have been expected, a change

amounting to a revolution took place, and the name of the illustrious Frenchman, Ambrose Pare stands out in bold relief, as the monument of a new era. Pare revived the use of the ligature, in the face of tremendous opposition, but, as fire arms were then used in war, and, as a consequence, amputations had to be frequently resorted to, the great surgeon triumphed. He had truth on his side ; and sooner or later truth must prevail. I may remark incidentally, that Pare was only saved from the massacre of St. Bartholomew by the personal exertions of the cruel monarch who permitted that horrid butchery of the best and noblest of his subjects.

As a consequence of anatomical study, the circulation of the blood was discovered by the immortal Harvey, in 1619. This was, doubtless, the greatest discovery of the age ; and, if we, as Britons, point proudly to that great name, our pride is surely laudable.

Towards the close of the 17th century, Chamberlin so much improved the obstetric forceps, that he is almost entitled to the credit of their invention. Previous to his time, all the forceps that we have any account of, were joined by a fixed hinge.—If it is sometimes exceedingly difficult to apply the separated blades, what must it have been to apply them united ?

The great discovery of the value of vaccination by Jenner in 1775, has been the means of saving thousands, aye millions of lives, and of preventing an inconceivable amount of human suffering ; and the discoveries of his great Scotch cotemporary, Hunter, are sufficient to mark the close of the 18th century as an era of great mental activity and achievement.

It will be remarked that I have drawn more upon the department of surgery than medicine for illustrations ; the reason is obvious. Surgery was much earlier guided by an approach to fixed principles than medicine, indeed it is not until after the discovery of the circulation of the blood in 1619 that anything like definite principles were established. Previously physicians kept their individual principles,—if they had any—and their remedies, and modes of treatment to themselves. It is true there were the theories of the Humoralists and Solidists, the Methodists and Eclectics, and of those who classified disease as either sthenic or asthenic, this being the nearest approach to principles, and certainly simplified diagnosis and treatment. A disease being referred to its class was invariably treated in the first, or sthenic class, by depressants, in the

other by stimulants. Up to comparatively recent times physicians mixed up their *materia medica* with the occult sciences, witch-craft, and demonology, and depended more upon dreams, charms, incantations, and the touch of royal and other privileged personages than upon *materia medica* properly so called.

The Pharmacy of early days was rude in the extreme, and comprised all the abominations of a witches' cauldron. The flesh, blood, brains and excrement of birds, mammals and reptiles were freely prescribed; and such vegetable agents as were employed were of the most violent drastic character, and in the crudest form. The art of the Apothecary was unknown, and chemistry unheard of. Rhazes and Avicenna, two Arabian Physicians, introduced chemistry into medicine about A. D., 1,000, and from that time Pharmacy has improved until the refinements of the present day has resulted as an era of wonderful achievement.

Coming now to our own more immediate time, how are the medical men of our day discharging the great trust transmitted to them? Has the mantle of the illustrious past fallen upon our times? Without arrogance we think it has. If the resources of the 19th century are boundless,—these resources have all been utilized; and, as a natural consequence, great strides onward have been taken. The surgery of our day has become eminently conservative—the medicine as eminently eclectic. The limb that 50 years ago would unhesitatingly have been amputated, is now restored to usefulness. The fever-stricken patient, who would have been bled, blistered, and purged off the face of the earth, is now, by the adoption of a more rational treatment, nourished and restored to health. The discovery of chloroform by Simpson has banished, never to return, the implements of torture of the operating table; the sight and adjustment of which were enough to appall the stoutest hearted patient. I have seen operations and have operated without chloroform, and, of course, with it, and I can assure you, gentlemen, that it is necessary to experience the difference in order to be in a position to rightly estimate this priceless boon.

Great improvement has also been made recently in the mode of performing capital operations, and in the manner of controlling hemorrhage, by the substitution of metallic ligatures and acupressure, for the old methods. But, notwithstanding all that has been gained—notwithstanding the marvelous revelations of the micro-

scope and chemistry—notwithstanding that the minute structure of the “fearfully and wonderfully wrought” human frame has been unravelled—notwithstanding that the function of every organ has been interrogated our work is far from done—progress must still be our watchword, “Excelsior” our motto.

The indications of the present time point to SANITARY SCIENCE as the fruitful field where fresh laurels are to be won. The *Prophylaxis* of disease rather than its treatment is likely to absorb the attention of the best minds of our time. The discoverer of a means whereby the ravages of the remaining exanthemata and cholera may be prevented, will deservedly occupy a niche high in the Temple of Fame, and he who contributes to cause only one case of disease to appear, where two formerly existed, is surely more deserving of being considered a benefactor of his race, than he who causes “two blades of grass to grow” where only one grew before.

One word in conclusion. The path of progress is still strewn with thorns. The blind prejudice of the ignorant ever has been, and still is, the worst foe to advancement. Medical science, like all other science, is sadly hampered by the lack of a more general and higher order of intelligence, capable of appreciating and seconding the efforts of its promoters. May we indulge the hope that our admirable school system will prove a powerful aid in this direction, and that it will materially aid in remedying this glaring defect? To the educated and refined alone need the Physician look for generous appreciation, and a full recognition of his professional worth and social status.

ON THE ADVANTAGES OF ETHER OVER CHLOROFORM AS AN ANÆSTHETIC AGENT.

BY R. H. CAREY, M.D., (HARVARD) LUNENBURG, N. S.

The use of anæsthetics in surgical operations has been, I might almost say, co-existent with the science of surgery. Pliny mentions that mandrake root steeped in wine was usually given to persons about to undergo surgical treatment, in order to produce insensibility; whilst Apuleius speaks of its use by criminals before receiving punishment.

The Chinese, more than 1,500 years ago, used a preparation of hemp or mayo to annul the pain attendant upon cauterization. Pulleyn, in 1579, mentions the possibility of putting patients who were to be cut for stone into a "trance or terrible dream," by the use of mandrake.

Again, John Baptista Porta, of Naples, in his work on Natural Magic, (1597) speaks of a quintessence extracted from medicine by a somniferous menstruum, the nature of which he does not explain. This was kept in leaden vessels perfectly closed "lest the aura should escape, for the medicine would vanish away. When it is used, the cover being removed, it is applied to the nostrils of the patient, who draws in the most subtile power of the vapour by smelling, and so blocks up the fortress of the sense, that he is plunged into the most profound sleep, and cannot be roused without the greatest effort,"—adding rather quaintly, that "things are plain to the skilful physician, but unintelligible to the wicked."

In Middleton's tragedy of "Women beware Women," published in 1657, there is the following passage: I'll imitate the pities of old surgeons. To this lost limb, who e'er they show their art, cast one asleep, then cut the diseased part."

Dr. Snow suggests that the evanescent substance referred to by Porta was sulphuric ether, which had been described more fully fifty years before Porta's book appeared. Compression on the Nerves, by Dr Moore, in 1784; Nitrous Oxide, by Sir Humphrey Davy, in 1800; and Carbonic Acid Gas, by Dr. Heckman, in 1828, were the agents in the latter part of the last and the beginning of this century, considered most useful in producing anæsthesia.

In 1846, sulphuric ether was first used in Massachusetts General Hospital to prevent the pain of an operation, and during the latter part of the same year, was extensively used in England and America. After the lapse of about a year, Dr. Simpson, of Edinburgh, discovered the anæsthetic properties of chloroform, and used it in his own department, that of midwifery; since then chloroform has been the anæsthetic most employed by British Surgeons. The advantages of chloroform over ether are, 1st. Its more agreeable odour; 2nd. Its more rapid results; and 3rd. The lesser bulk of chloroform required to produce anæsthesia.

In the truth of the first and third of these so-called advantages, every one will coincide; concerning the second, "that it is a more

rapid anæsthetic" I am inclined to consider it a rather doubtful benefit, since it undoubtedly holds true that rapid anæsthesia, although complete, is generally of very short duration, so that the patient may recover his sensibility as rapidly as he lost it. This seldom occurs when the anæsthetic has taken effect in a slower manner, and may be explained by supposing that a volume of the blood first charged in the lungs, passes to the brain and narcotizes the patient, and that the blood remaining in the extremities, as yet uninfluenced by the vapour, will, if the process of narcotization be arrested, in its turn flow through the brain, and thus revive the patient. It will therefore be apparent that a more protracted inhalation, such as is the case with sulphuric ether, ensures the gradual and complete saturation of the whole circulatory system, and that in consequence a more durable and profound state of anæsthesia, and more satisfactory for surgical purposes, is obtained.

There are some other inconveniences incident upon the use of chloroform, such as its tendency to excoriate mucous surfaces when applied to them, often producing serious effects, such as sloughing.

But the great objection to the use of chloroform, and one that merits the grave consideration of every surgeon, is its tendency to produce death. The fatal cases resulting from its use, have been so numerous and incontrovertible, that we are not surprised to see its most strenuous advocates decrying its too general use, and advising certain restrictions in its exhibition. By the very rapidity of its action, chloroform causes death by paralysis of the heart or overloading of that organ. This is especially the case where fatty degeneration of the heart exists, and in these cases all are resolved that it should never be used. But in how many instances do we find that the *post mortem* alone reveals the presence of disease contraindicating the use of chloroform?

Again, its advocates have always taken special pains to impress the fact, that except in the hands of experts, chloroform is always dangerous. This I conceive one of the strongest arguments against its use. How many of those who have been disciples of its champion, Dr. Simpson, have had whilst under his tuition the amount of experience in its exhibition necessary to qualify them for proper administrators of it? And how often does it occur that they are called upon to use it now? So that they can hardly be said to possess the amount of confidence and experience requisite to warrant perfect safety in the administration of chloroform.

On the other hand, certain conditions being fulfilled, sulphuric ether is of all anæsthetics the safest, and therefore the only one worthy of entire confidence. These conditions are pure ether, not oxidised through imperfect corking, containing no alcohol, sulphurous acid or volatile oils, the presence of which is apt to produce imperfect etherization and cause bronchial irritation. When ether, free from these impurities, is administered, statistics of its use demonstrate its perfect safety. The committee appointed some years ago by the Massachusetts Medical Society to report upon anæsthetics, state most unhesitatingly, that a "death really attributable to the inhalation of sulphuric ether has yet to be recorded," and quote in support of this statement several eminent authorities, both in Europe and America.

In 1857 it was affirmed that, in the civil and hospital practice of the city of Lyons, ether was exclusively used for eight years consecutively, and that during that period no deaths from the inhalation of anæsthetics occurred, and this assertion was substantiated by reference to the Civic Registry. Again, from the first administration of sulphuric ether in Boston, to the present time, where it has been used in some thousands of cases, no fatal consequences have followed.

From the frequent deaths from chloroform, a healthy spirit of enquiry has been excited amongst even its most strenuous supporters, and we find such men as Ricord and Erichsen inveighing against its use, the former speaking of its exhibition as an accident that complicated an operation, the latter stating that "when a patient was fully under chloroform, he was on the verge of death."

Erichsen again in his *Science of Surgery* states very plainly the reasons for the use of chloroform. He says, certainly ether is a safer agent than chloroform, no death having as yet resulted from its administration, and the only argument in favour of the use of chloroform over ether is: chloroform is the most convenient agent, its effects being produced more quickly and no disagreeable smell left behind, as is the case with ether. In fact we use chloroform in preference to ether, on the same principle that induces us to incur the increased risk of an express, rather than submit to the slower but safer progression of a parliamentary train. In a note to Druitt's Chapter on anæsthetics he quotes on the authority of the *Westminster Review* that the total number of deaths from chloroform up to

Dec. 1858, were 68 ; those from ether, 2. On reference, however, to the article by the author's own showing, the deaths ascribed to ether were not immediate, one surviving the operation 16 and the other 19 hours, which, together with the *post mortem* appearances of these alleged cases, render it exceedingly impossible to prove that ether was in any way connected with the fatal results.

With an apparent strong predilection for chloroform, Dr. Drutt is obliged to confess, which he does in a very emphatic manner, that ether is certainly, to say the least, a much safer anæsthetic.

In an editorial article in the *American Medical Times* for 1860, reference is made to the constantly recurring deaths from chloroform, mostly from paralysis or overloading of the heart, and whilst arraiging what are termed the inconveniences of ether, it confesses the feeling of insecurity in the exhibition of chloroform gaining ground, and mentions the fact of the propriety of its use, being a question raised by the Medical Board of Bellevue College Hospital, and at the same time remarking on its exclusion from the New York, Pennsylvania, and Massachusetts General Hospitals.

Taking everything into consideration, therefore, it does not appear to me that the trivial advantages of agreeable odour and greater portability compensate for the deleterious and deadly effects of chloroform, and does seem a strange and sad confession on the part of its votaries to say in effect that it can't be denied that it is dangerous, but then it is so very convenient.

It may be said that, with proper precaution and skilfully applied, it is comparatively harmless, but how often have fatal effects followed its administration by its very discoverers ; how often, especially in country practice, must the care of etherization be confided to students unapt in its administration, unaware of its toxicological properties, unmindful of precautionary measures and unheeding alarming symptoms. In conclusion, when we have a safe, or stating the case less strongly, a safer anæsthetic than chloroform, it is surely quite unjustifiable and highly reprehensible for surgeons to adhere so rigidly to the doctrines and dogmas of masters, no matter how eminent, and refrain from using sulphuric ether on account of its origin and odour, and exhibit chloroform, whose deadly properties have but in too many instances merged the sleep of anæsthesia into the "sleep of death."

CASES IN PRACTICE.

BY W. S. CHRISTOE, M.D., FLESHERTON, ONT.

Case I. EMPYEMA.—This according to authors may be true or false; true when the pus is secreted by the pleura, and false when it results from the bursting of an abscess of the lung into the cavity of the chest. In quantity it varies from a few ounces to many quarts, filling the entire cavity of the chest; in quality the pus in true empyema, varies from a genuine laudable pus, to a sero-purulent fluid, whilst in false empyema, it partakes more of the expectoration present.

I had a little patient some time ago, who proved very interesting on account of the disease mentioned above. He was about eight years of age. He was attacked with Pneumonia of the left lung, and was attended by Dr. Sproul of Markdale, who likewise consulted with Dr. McGregor of Chatsworth. The case received the utmost care and attention, but convalescence failed to be established, and the lad became gradually worse. Great pain over the pubes with difficult micturition set in. I was called merely to give relief, to permit him to die quietly, the other gentlemen's services having previously been dispensed with. I found the little fellow labouring under severe strangury arising from the effects of Emplastrum Cantharides, which had been applied to the chest. Using the usual remedies—sedatives and demulcents—he was soon relieved.

About two weeks after this, or the 26th day of June, when I made merely a friendly call, I noticed a bulging of the left side of the thorax, and an apparent pointing of an abscess below the nipple a little anteriorly. Not having met with such a case in my practice before, I was at a loss to know what to do. The pulse being about 150, respiration rapid, with cough and emaciation, the symptoms generally hopeless, my first impulse was to let him alone, without any attempt to relieve him. I had an instinctive dread to perform paracentesis, lest by the introduction of air to the cavity of the chest, I should but hasten the impending dissolution. I had read Dr. Oldright's article in the April number of the *Lancet*; his cases were interesting and instructive, and rather strengthened my

desire to operate. The following day with the consent of the parents I did so, using a trocar and canula. As the place was sufficiently indicated by the pointing I had no difficulty in selection.

Having first used an exploring needle, I thrust in the trocar, and at every expiration a full column of semi-purulent fluid was thrown out, until about three quarts altogether was discharged, emitting no unpleasant odour. The next step was not of easy solution. Should I now wash out the cavity? Or would it be as well to keep the aperture open and risk the consequences? Or would it be better to close it and re-open if necessary? Being sensible that I would not be permitted to reopen it again, I sought, contrary to matured opinion, to keep it open, and to this end I had a short silver tube made with rim, under the supposition that I could keep it in situ with elastic bands around the chest, but in this I was mistaken; after one or two efforts I failed, and relinquished it. I sadly feared it would close, but in this was agreeably disappointed. Whenever it became partially closed, and the discharge visibly diminished in quantity, its accumulation in the chest, would invariably create cough, by which it was forcibly expelled, and thus I was happily spared further trouble on that point, the aperture being kept sufficiently open. It was difficult to ascertain the daily discharge. During the first fortnight, it was rather large, then diminished gradually, until about the sixth week when it ceased altogether. When I last saw the lad, the chest was visibly flattened on the left side, and the respiratory murmur notably lessened, but the cough subsided, the strength returned, and he is now quite recovered. It was with no small effort the child's strength was sustained. Nutriments, to the extent of the stomach's digestive powers were given, comprised chiefly of cream and beef tea, together with moderate stimulants. The medical treatment was, I confess, somewhat unique. Tonics and alteratives were to my mind indicated. I knew many good ones, but always failed to make them sufficiently palatable for children's use. I had exhausted the materia medica on a little patient some time before having hip disease, and although I was always rigidly opposed to anything like quackery, I was induced to try that empirical preparation known as the Elixir Iodo-Bromide of Calcium, by Tilden and Co., of New Lebanon. The preparation is very palatable and possessed of alterative and tonic properties, indicated in this disease. I gave it to her for a continued period,

with visible signs of improvement. The appetite returned, the excessive discharge from the joint ceased, and my little patient wholly restored with shortening only. It's true I used carbolic acid injections conjointly. Having this case so recently before my mind, I put the lad on the same. He took about one bottle and a half of it with the success I have named. I injected nothing whatever into the cavity. If, therefore, I had similar cases, I should most certainly favour the New Lebanon preparation, if it could be had. I am convinced that this was a case of false Empyema, for the fluid from the opening and the expectoration, were similar. It therefore must have been an abscess that opened into the cavity of the chest, and I think this is further established from an incident occurring during its collection in the lung. The little fellow was coughing one morning more than usual, and expectorated excessively, inso-much that an abscess larger or smaller, was supposed to have come in contact with one of the bronchi, and thus discharged itself. It gave him much ease, it was however transient, for the expectoration ceased, and the abnormal respiration, and general dullness returned. Now the larger expectoration at this time corresponding in character with the still larger quantity from paracentesis—with the positive fact of the former coming from the lung—is I think proof positive. This case proves, as far as one case can do, that the much ado about the introduction of air into the cavity of the chest is absurd. Here is a case in which the chest was so filled as to occasion dullness over the whole of the side affected. In no part of it was the voice conveyed to the ear, and the spine seemed to be bent to accommodate the superabundant accumulation; yet the discharge remained unchanged in its character, excepting in its later stages, when it became clearer, with a few flakes of lymph in connection; nothing of putridity was seen. It furthermore satisfies me, that the great desideratum after paracentesis is had, is to heal the pus-producing surfaces by administering drugs, possessing unquestionable alterative and tonic properties, and for children, where prolonged use is necessary, those that are palatable are the best.

Case II. PROTRUSION OF THE STOMACH.—J. H. Aged 20 was chopping with two or three others, and was struck with the limb of a tree. In its descent it struck another tree, and broke, leaving a somewhat rough, wedge-shaped point. The force pushed

it through the garments of the arm, and it entered the abdomen rather obliquely, making a wound about five inches long. He had received the injury about an hour before I saw him. Vomiting was present, and in consequence the stomach was thrust through the peritoneum, and through the rough lacerated wound, more and more at each expulsive effort. I immediately endeavoured to return it, but manipulation only increased the vomiting and pain. I therefore ordered warm cloths until I resolved what to do, for it seemed to act like a strangulated hernia. I sent for Dr. Sproul of Markdale, having parted from him only a short time before. He however was longer arriving than I bargained for, and I proceeded without him. I first gave the patient a full dose of morphine, to quiet him, and when he was considerably under its influence, I commenced the administration of chloroform, with the assistance of a judicious friend, and when fully under its influence, I gave the chloroform in his charge, and proceeded to return the stomach but found it impossible, without enlarging the aperture. I accordingly did so at once, and with quite an effort succeeded in returning the stomach; this done, I hesitated a moment, as to the comparatively large quantity of omentum left. Must I return it? Being satisfied the circulation through it was good, I returned it *en masse*, and put in five or six sutures. I dressed the wound, applying plasters, at which stage Dr. Sproul arrived, and finished the dressing by applying pad and roller; ordered cold water dressings. Hiccup was present from the first. He was kept well under the influence of morphine. During the remaining part of the day (January 18th) he rested tolerably well. On the 19th a. m., pulse 90, reaction fully established. Dr. Sproul saw him later, and informed me that the symptoms were quite satisfactory. Ten o'clock p. m., fever very high, pulse running up rapidly. Ordered an injection of warm water, and used nitrate of potash in ten grain doses every hour, until the fever was somewhat controlled.

20th. Under this treatment the pulse fell to 92; thirst abated and the temperature of the body was reduced. Continued the treatment, gradually withdrawing the potash. Tympanitis was very troublesome, and I was afraid after all, the patient would sink. Ordered enema of assafoetida, and very weak soap suds. A good deal of flatus escaped. I was also obliged to use the catheter.

21st. 5 a. m. Called up. Patient reported worse. Repeated the

enema, used the catheter. Noon, patient about the same, pulse 90. 10 p. m., distension of the bowel very great, but the pulse had fallen to 85, notwithstanding considerable tenderness over the abdomen. Ordered an enema of turpentine and assafœtida in a pint of water. This proved very beneficial. I gave a hypodermic injection of morphine over the abdomen, and left him for the night.

22nd. Patient much better; perspiring freely, tympanitis gone, pulse normal. The wound was united excepting one corner, where pus is exuding slightly. During the treatment he has taken beef tea in small quantities hourly. I look for a successful termination.

NOTES ON OBSTETRICS.

BY T. W. KNAPP, M.D., EDIN., SACKVILLE, N. B.

PLACENTA PRÆVIA.

Case 1.—On the 11th of November, 1872, at about 2 o'clock, a.m., I was requested by the husband of Mrs. A. to visit his wife, a tall, thin, slight woman, aged 35, the mother of four children, and whose labors had always before been natural. He stated she was about being confined, was very weak, and flooding. In order to save time, I was driven by himself to his residence, a distance of about a mile. On arriving at the door, I at once dispatched him for brandy, there being none in the house. Upon entering the patient's room, I found her lying on her back, her face pinched, anxious, and blanched, her extremities cold, and her pulse extremely weak and tremulous. Her night dress and the clothes of the bed were completely saturated with blood. She stated she had had no pains and no uterine contractions could be felt when the hand was placed over the uterus. She was thought to have been about *eight months* pregnant. I was informed the flooding commenced about a week previously, but only continued a short time. An examination, *per vaginam* enabled me to distinguish the placenta which occupied a position directly over the os uteri, the latter being flaccid and dilated to about one fourth of its full extent, and the former separated from the cervix to the extent of about two inches, the detached portion being nearly opposite the right hip joint. The head of the foetus was the presenting part—the membranes were unruptured. As

the patient refused to submit to an operation before the return of her husband, I was forced to content myself with the administration of ergot of rye in powder, gr. xx., with borax, and an occasional dose of the aromatic spirits of ammonia, the only stimulant I had with me. The delay, about ten minutes, nearly proved fatal, as a few minutes before his return she passed into a state of syncope, from which she was with difficulty roused by the application of strong ammonia to the nostrils, and friction to the extremities, &c. Immediately upon the return of the husband, half an ounce of brandy was given with water in divided portions by means of a teaspoon, the patient's head having to be kept low. I at once turned and delivered. The hand passed into the uterus with the greatest ease, and the membranes not being ruptured until after its introduction, the operation was performed very quickly. The whole time could not have occupied over two minutes, including the removal of the placenta, which I at once extracted without waiting to tie and divide the cord. The uterus contracted firmly, and no perceptible flooding occurred during the delivery. The mother made a speedy and good recovery. At first the child did not breathe, but by using the ordinary means was soon resuscitated.

REMARKS.—I am aware the late Sir James Simpson advocated the separation of the placenta in place of turning in cases of placenta prævia. Without wishing to oppose views, advanced by so high an authority, I can only say I have always resorted to turning in such cases. I have hitherto lost no mothers. On account of the loss of blood rendering the os uteri soft and yielding, turning is generally easily performed. In the present instance the patient informed me she had had no pains from the commencement, and I should, it is highly probable, have had to deliver by turning had I first separated the placenta, which would have been doubtless fatal to the child and most probably also to the mother, in her exhausted state, as in separating the placenta I would most likely have ruptured the membranes, and thus rendered the delivery much more difficult.

CASES II AND III.—TWO LABOURS OCCURRING IN THE SAME WOMAN, COMPLICATED WITH FIBROUS-TUMOUR.

Mrs. B., aged 33, who miscarried in her first pregnancy, at the second month, summoned me to attend her late on the evening of the 21st June, 1871. As the os uteri was not dilated on my arrival,

and I had other matters of an urgent nature requiring my attention, Dr. William Knapp, a junior brother, took charge of the case for me. I did not see her again until the evening of the 22nd, when I found the os fully dilated and the membranes entire. The pains were strong and regular. I at once ruptured the membranes, and in about an hour the labour had advanced to the middle of its second stage, when, though the pains still continued strong, it made no further progress. The fundus and body of the uterus were very prominent, and the abdomen as much distended as in twin cases. After waiting fully an hour, and finding that the head remained stationary, having first evacuated the bladder and rectum, I delivered her by means of forceps of a living, full-grown child. The uterus did not contract, but, on external examination, was found to be very hard. A considerable interval having elapsed, and no expulsive efforts being made, I cautiously passed my hand into the uterus and found the placenta attached high up to the fundus and posterior walls of the organ, and a hard unyielding tumour imbedded in its posterior parietes, which extended from a little above the cervix to the insertion of the lower edge of the placenta, causing the latter to occupy a deep hollow behind it. Consequently, if the placenta could have been detached by the uterine contractions, it would have to pass over the upper convex surface of the tumour before being expelled. On this account I was compelled to remove it by means of the hand. No hemorrhage followed, and the uterus contracted to the extent permitted by the tumour, the upper portion of which still occupied a position about midway between the umbilicus and ensiform cartilage. I diagnosed the tumour to be fibrous. Notwithstanding the complication caused by the tumour, the patient made a favourable recovery.

On the 17th of December, 1872, I was again called upon to attend Mrs. B. I found her in the first stage of labour, the os uteri about two-thirds dilated, the pains strong, and the membranes entire; the nates presenting. The labour advanced until it had reached the same stage as the first labours, when as before, the pains ceased to have any influence in advancing it, on account of the resistance caused by the tumour neutralizing the expulsive efforts of the uterus. I consequently brought down the feet and delivered her of a strong, healthy boy. I had the same difficulty with the placenta as on the previous occasion. The tumour had not increased in size since her

last confinement. On the 19th of December, I was summoned hastily to see her, and found her suffering from severe pain in the abdomen. The uterus was contracted to the extent admitted by the tumour, but was tender when pressed upon. The abdomen was tympanitic. She had vomited several times. The pulse was rapid and tongue dry and coated. Respiration hurried. Lochia scanty. Prescribed pulvis opii in half grain doses every four hours, and flannel cloths saturated with equal parts of turpentine and warm water were applied to the abdomen; to have light diet and injections of warm water *per vaginam*. 20th.—Has kept down the powders, and the pain has left the abdomen, which is still tympanitic. Ordered a turpentine enema, which greatly relieved the distention. If the pain returns, to take the powders as before. 21st.—Has diarrhœa, but tympanitis has subsided. Administered starch enema with tinct. opii, which remained up some hours, during which she was very comfortable. 22nd.—As she is still feverish, and there is slight diarrhœa I prescribed liquor ammon. acetatis ℥ss. , morph. sulph. gr. $\frac{1}{8}$ every four hours. 24th.—Appetite returning, and better in every respect. She has been taking tinct. ferri. mur. since yesterday, and chicken broth with rice. As she seemed improving rapidly, I discontinued my visits. 28th Dec.—As she was suffering from severe pain in the spine, caused probably by the pressure upon the nerves, I was called in again, and relieved her with morph. sulph. I continued to attend her until the 1st of January, and finding her again convalescent, prescribed equal parts of acid hydrochlor. dil. and acid nitric dil. to be given in doses of twenty drops in a wine-glass full of infusion of cinchona *ter in die*. I again left off attending her, directing her husband to send for me if she did not continue to improve. The only other treatment was the substitution of a lotion containing one part of carbolic acid to forty of water, to be used as a vaginal injection, in place of the warm water. I saw her husband several times after I had ceased to attend her, and he always informed me she was doing well. About three weeks ago, however, I was informed by some of her husband's near connections, that Mrs. Cardy, a female Dr., and a Dr. Flemming, who has only been a short time in Sackville, had visited her and had a consultation about her case, and that I had been much censured by them on account of the powerful medicines I had employed, especially the use of turpentine.

REMARKABLE CASE OF TETANUS AND SELF-MUTILATION.

BY J. M. HART, M.D., CAMBRAY.

Was called on the 7th Dec. to see F. H. æt 19. All the muscles of the trunk were rigidly contracted, as were also those of the neck and jaw, there was complete opisthotonos, severe paroxysms occurring at short intervals, when the jaws were firmly clenched and the body bent backward to form a complete arch. The countenance was expressive of much pain and anguish; the features were fixed and convulsed at times, and at no time could he separate the teeth more than $\frac{1}{2}$ an inch. The head was thrown backward and the abdominal muscles were extremely rigid; pulse about 90; respirations occasionally difficult; intellectual faculties clear; skin clammy. On making enquiry I was informed that about a week previously he had received an injury; a punctured wound of the knee, situated at the lower margin of the patella caused by striking the knee against the tooth of a cross-cut saw. There had been considerable swelling at first, which subsided in a few days. On making pressure above the wound a paroxysm was at once produced.

Gave the patient hydrarg submur, grs. x. and put him on pot. iodidi grs. vi. together with ʒss. of tr. cannabis indica every hour. Ordered a poultice to be applied to the wound. There was some tenderness of the spine, and a bladder of pounded ice was applied. Diet nourishing, consisting of eggs, milk, beef ext. &c.

Dec. 9th, morning.—General condition of patient much as before; has rested better at times, but is frequently awakened by a violent paroxysm. Gave a large dose of chloral hydrate, and proposed dividing the nerve above the injury; but the patient and his father dissented. I then asked for a consultation, and my esteemed friend, Dr. Herriman of Lindsay, was called in. Evening.—Again visited patient in company with Dr. Herriman; has slept comfortably for some time after taking chloral; vomits frequently; has hiccup. We decided on dividing the injured nerve. Dr. Herriman accordingly placed the patient fully under the influence of chloroform, and I made a Λ shaped incision above the wound, divided all the structures freely down to the upper margin of the patella. After he recovered from the influence of the chloroform he

seemed better. Pressure above the wound did not now produce a paroxysm. He was then put on chloral hydrate grs. 15 every four hours; pot. iodidi, and cannabis indica, as before; gave an enema of solution of tobacco, which relaxed the abdominal muscles, relieved the hiccup, and pain in the region of the diaphragm; to meet Dr. Herriman in the morning.

Dec. 10th.—Patient has been more comfortable; paroxysms not quite so frequent nor so severe. Treatment continued: sent to Toronto for calabar bean, and nicotine.

Dec. 11th.—Patient more comfortable, with the exception of two very severe paroxysms shortly after midnight; complains of the ice to his back; discontinued its use; tobacco to be used every 6 hours.

Dec. 12.—Patient continues to improve; has had two or three severe paroxysms during the night about the same time as the night before. As there appeared to be something periodic in their occurrence, I left a couple of powders of Quinia. sulph. Calabar bean and nicotine arrived; gave $\frac{1}{2}$ gr. ext. calabar bean every four hours; did not use nicotine, as the tobacco appeared to answer every purpose.

Dec. 13th.—Patient has been tolerably comfortable; appetite improving; not so much rigidity of trunk; abdominal muscles much relaxed; can open his mouth better.

I made a discovery this morning which, had I known it at an earlier date, and before improvement began, would have served to very materially affect my prognosis. It appears that a few days before he injured his knee, he had been climbing over a high rail fence, and when on the top rail, slipped, and in falling was caught by a sliver, which entered the scrotum, and made a long rent, through which the right testicle protruded. He said nothing about the matter; but according to his statement, in a day or two the testicle turned black, and he ligatured the cord *en masse*, and cut the testicle off. As improvement had set in, and there was no tenderness in the region of the scrotum, I merely ordered a poultice to be applied, and continued the same treatment.

Dec. 14th.—Patient much as when visited yesterday.

Dec. 15th.—Continues to improve.

Dec. 17th.—Patient does not appear so well; has had several paroxysms, though not of a very severe character; appetite not so

good ; bowels were not moved yesterday ; ordered a copious enema of soap and water ; some tenderness of scrotum and stump of cord, which is quite hard ; poultice to be kept warm, same treatment continued.

Dec. 18th.—Visited patient to-day in company with Dr. Herri-man. Patient more comfortable, applied to wound in scrotum, ung. ant. tart. with a view to causing a discharge.

Dec. 20th.—Patient much improved in every way, all the muscles much relaxed ; general health good. He has continued to improve up to the 6th Jan. when he was able to go around the house with ease. I have not seen him since ; but was informed by his father the other day that he was quite well.

AMENDED MEDICAL ACT.

To the Editor of the Canada Lancet.

SIR,—So far as I can learn there seems to be a fixed and growing want of confidence in the executive abilities of the Medical Council prevalent among the profession. By Act of the Provincial Legislature, a corporation has been brought into existence whose special duty it is, or should be, to *effectually* guide and guard our interests. How far it does so has long been a fair question, and is now a question of great import. The Council, in the Act of 1869, provided a first *approximation* only to what was required in the way of legislation. If the penal or any other clause is found to be ineffectual through lack of means provided therein to make it efficient, it is the *plain duty* of the Council to secure such amendment. They at the same time desire to increase the revenues of the College by an annual assessment of not more than \$3 per annum on each of its 1528 members. Strange to say, they make the amendment of the penal clause contingent upon obtaining this annual licence fee as though there were some necessary connection between the two. This, in the words of a circular sent out by the Registrar, apparently the expression of the Executive Committee, assumes the offensive form of the plain threat, "it must be distinctly understood that if a general disapproval of the 'Annual Licence' clauses should lead to their being withdrawn, the 'Penal Clauses' will be withdrawn like-

wise." There's coercion for you ! It would be well for the profession to give the Executive Committee to understand that the days of terrorism are over. Let them go a few steps further and they will levy black-mail on us. If the Council can secure an Amended Act with a satisfactory penal clause *with* the "Annual Licence," why can they not secure it *without* it? Is the implication that the "almighty dollar" is to have its omnipotence tried upon M.P.P.'s? If not why can't the Licence clauses stand upon their own merits? When the Council can show us by *acts* that they indeed guard our interests efficiently it will be time for them to ask for a pecuniary expression of confidence in their administrative ability, but until then, in granting it, we would be but giving a premium to those who shirk duty, and every new attempt at securing our rights might be made the occasion of securing a fresh bonus. Let the, in many respects good, Act of 1869 be still further approximated to our wants, and should the Council (having thereby secured our confidence and deserved our gratitude) require a greater income, it will be forthcoming, and that with no niggard hand.

The merits of the Annual Licence clause are fairly questionable. At a nearly full meeting of the Council on the 11th July, 1872, the Committee appointed to prepare a synopsis of the amendment necessary to the Medical Act advised (among other things) "lessening the number of the Council and Examiners" but this was expunged forthwith and the report was otherwise adopted. They then threw overboard one plan for diminishing the present expensive working. Hitherto \$10 has been the fee for registration which we accepted in good faith as sufficient for life membership. But now a demand for \$2 per annum, it may be \$3, is made upon us. It requires \$25 invested at eight per cent. per annum, to produce \$2, or \$37.50 to produce \$3, so that the Council virtually is putting on an additional registration fee of, say \$30. And for this we have, what? Why, nothing but a rotten promise that they will *then try* to obtain for us what we are entitled to already at the hands of the Council. For myself, before confiding further I want a substantial and unquestionable *quid pro quo*. If the students in mass meeting want to know what they are paying for, so does the profession in practice. If the Council resent the "threat" of the students to absent themselves from examination in April, so well may we as constituents resent the threat of our representatives that they will

not present our rights before the legislature unless we yield their pecuniary demand.

It must be admitted that the action of the Council hitherto has been very much more in favor of giving substantial advantages to the several Medical Colleges than of legislating for the benefit of the profession throughout the country. It has always seemed to me that each meeting of the Council has been managed by those peculiarly interested in the welfare of the teaching colleges. As a single example of this there was passed on the 12th of July, 1872, the following resolution: "That after this date no certificate of pupillage or of attendance upon lectures in any college shall be recognised as valid unless the same be signed by a duly registered practitioner, except in Chemistry and Botany." This in effect amounts to this:—certificates signed by men of as high professional standing as Gross, Thomas, Sayre, Spencer Wells, Simpson, Virchow or Robin are not valid, while those of teachers of merely local celebrity are to be accepted. Hence students are compelled to obtain, by payment, the requisite certificates from some one-horse provincial institution, *and then* when the provincial college has bled his pocket as fully as it can, he may seek a higher training from masters of the healing art elsewhere. That is a precious exception: "except in Chemistry and Botany;" verily, there must have been a professor at the elbow of the writer of that resolution, so well does it apply to Ontario Colleges. Were the interest as direct, doubtless the regulation "he must attend the practice of a General Hospital for eighteen months" would read thus: "He must attend the practice of an Ontario General Hospital." *On paper* the requisite "Two courses of six months each on clinical medicine and clinical surgery," reads well, but *de facto*, the Council has in the past, year after year, admitted to its examinations, students *en masse* scores of whom were never at a single clinic and are perfectly innocent as to how they are conducted. Why don't they say right out that all are required to avail themselves of the magnificent clinical advantages of Toronto General Hospital and the Dispensary on York Street, while students who have served years on the intern staff of Guy's Hospital shall not enter the examination Hall of the C.P. & S.C. It would only be consistent with the certificate regulation. The Hospital regulation is not so worded and the reason is obvious. You have, yourself, Mr. Editor, already called attention to the monstrous

anomaly of requiring a M.R.C.S. Eng., (*e.g.*), to pass the examination of the Council with which this is of a piece. Would it not be well that the representatives of constituents at some distance from the collegiate centres see to it, that regulations are not prompted by and framed in the interest of schools.

Allow me to say, in concluding, sir, that my remarks are not the result of a spirit of querulous fault-finding, but spring from a hearty good will for the advancement of the profession in Ontario. As your pages are read by professional eyes only, I deemed them more suitable for criticism than the columns of a daily to which I notice that others are now daily resorting.

I am, sir, respectfully yours,

A. HAMILTON.

Millbrook, O., Feb. 22d, 1873.

To the Editor of the CANADA LANCET.

DEAR SIR,—In the *Lancet* for January I observe you have seen proper to pronounce upon what you term a “breach of professional etiquette,” as between myself and Dr. Philp of this village. Perhaps it would have better served the cause of truth and fair play between members of our noble profession, if a little care had been taken to ascertain the facts before pronouncing an unqualified condemnation of the course pursued by me in this so-called scarlet-fever case. The fly-sheet, issued by Dr. Philp, upon the strength of which your remarks seemed to be based, I regarded with perfect indifference, as I was well aware that in this community it could do no harm whatever, and the sequel proves this true, for the effects of that wonderful production were and are perfectly *nil*, but when, through your article it became spread throughout the profession, I have deemed it my duty to make an explanation of the case. It must be remembered that the excitement in this community was exceedingly great, owing to the prevalence of small-pox in an adjoining neighborhood. The conduct of Dr. P. in this case, in not allowing persons to go in, and his own scrupulous care not to carry the contagion to his family, raised the suspicion, that notwithstanding he had pronounced the disease scarlet-fever, it might after all be the much dreaded small-pox. As I was waited upon by the father of

the deceased, and subsequently by the Reeve of the Township, and urgently requested for the purpose of public peace and safety, to examine the body. I could no longer regard the matter with indifference, and therefore reluctantly complied.

If some more agreeable man had been my *confrere*, I should have thought it better to have requested him to accompany me, but under existing circumstances, deemed it unnecessary. The body presented no outward signs of having died of scarlet-fever, and from information given me regarding the symptoms of the disease, I was led to the conclusion that she died of neither small-pox nor scarlet fever, and I, by no means, pronounced dogmatically that she died of diphtheria.

The interview, of which such a flourish is made, was simply no interview at all. Dr. P. met me on the street, and in a very excited and incoherent manner attacked me—professionally perhaps—when a few words passed in quick succession without any definite result save, I presume, his determination, in professional dignity style (?) to expose me through the medium of a fly-sheet.

I would not perhaps in the present case, have exceeded the limits of my power, if instead of merely visiting the body as I did, I had regarded the importance of the general feeling, and in the exercise of my official functions, have ordered an inquest and *post mortem*,

My standing with the members of the profession in this section is too well known to require any mention from me in this paper, and if the circulation of your periodical were confined to them alone, there would be no necessity for the explanation now given.

I am sorry, therefore, to be compelled to trouble the profession with this matter—of merely local interest—but justice to myself and to them demands it, and in the interests of both I have to respectfully request the publication of these statements in the *Lancet*.

Yours respectfully,

O. SKINNER

Waterdown, January 29th, 1873.

[Dr. Skinner's own letter admits all we charged him with, and if anything were wanting to complete the picture, it has been added by the learned gentleman himself in referring to an inquest and *post mortem* under the circumstances.]—Ed.

SINGULAR CASE OF HERNIA.

To the Editor of the LANCET.

DEAR SIR,—I beg leave to submit the following singular case of hernia for publication in the *Lancet*: M. P., æt. 66, whose right testicle never descended lower than the os pubis, has for forty years been affected with hernia on the right side. During the first thirty years, he had inguinal hernia, but the intestine for the last ten years had descended into the scrotum, forming there a tumour considerably larger than a man's fist, and frequently accompanied with severe pain, extending to the umbilicus. The intestine required to be returned five or six times daily. He has always been able to accomplish its reduction without professional assistance. Six months ago, he applied a truss with a spring so strong that he required to remove it daily once or twice for about an hour. After it had been used for three months, he discontinued its use, and for the last three months, the intestine has never descended, or been productive of the slightest inconvenience, even when he requires to use considerable effort at defecation, takes a heavy lift, or is seized with violent coughing.

WILLIAM WILSON, C. M.

Carleton Place, Jan. 30th, 1873.

To The Editor of the LANCET.

DEAR SIR,—On a former occasion I wrote to you honestly seeking information, and regret that none of my *confreres* vouchsafed me any. Though in my climacteric I am willing to be taught, and therefore (so far) entitled to teach, if capable of so doing. You were pleased to ask to hear from me again, and I avail myself of the invitation, though I know what I write will be unpopular with my brethren, and I fear unacceptable to you. *N'importe* I must find vent for thoughts that burn within me. Ours is called a "liberal profession," Why? Do its members evince true liberality?

I was lately called by telegram a long distance, to see a lady, formerly a patient of mine. There were at least thirty able practitioners in the city where she then was, but not one would go to see

her, until she first dismissed her medical attendant, who was one of the heretic sect—a Homœopath. Was this liberal? I know the systems we and they adopt cannot be conjoined—they are incompatible, but in many points we are at one with them, for example in diagnosis. Within the last year I was called to see a lady. She was indisposed, and believing in Homœopathy, had employed a Homœopath, the question arose, “Has she small pox?” It may be liberal to say, “the Homœopath must be ignorant indeed, if he could not decide that point!” Not at all.

I knew a case that occurred nearly fifty years since, where two medical gentlemen then at the head of the Profession in Montreal, whom I will only initial, Dr. S. and Dr. G., differed on this very point, and called in Dr. R. to decide the point, which the latter did before he saw the patient, by the pithy remark, “You are wrong my friend, *it is small pox, I smell it.*” Let us then pardon the young Homœopath for not being positive, when the first man in Montreal had to *smell it out*. Now the lady here had an undoubted right to select her medical attendant, and the other inmates of the house, and the public an equal right to be assured whether that fearful scourge was in the house. But my dignity forsooth would be compromised, if I go in company with her Homœopathic attendant, to view the case and give my opinion!

Within a few months I went to see a case of severe injury of the wrist. Query, is fracture complicated with dislocation? Must I refuse to give my opinion, because he will not turn off his Homœopathic friend?

Some years ago I rode thirty miles to see an obstetrical case, and horror of horrors, actually consulted with the medical attendant an Eclectic! I am an habitual sinner. I have again and again gone to obstetrical cases attended by Homœopaths, and laid the flattering unction to my soul that I was in the path of my duty, had benefitted my patient, and not derogated from my *dignity*, though a fledgling of two years standing here, lately boasted that he had never descended so low as to speak to a Homœopath in the sick chamber. Save the mark! The spirit of the age has become so far mollified, that the Bishop of London and Cardinal Wiseman can meet on the same platform, at any public meeting, where charity is the object, without bandying the epithets, “Idolator,” “Heretic,” and would it not be well, if the different branches of our profession

would treat a *gentleman* with courtesy, even though his theory differed as widely from ours as Wiseman and Cummings differ on the immaculate conception or Papal infallibility? If the *Odium Theologicum* (a proverb) is thus giving way, may not *we* also show a little practical liberality.

Of course I cannot consult with a Homœopath in the treatment of a case of Phlegmasia dolens. A case of puerperal convulsions, brings us instantly to a dead lock; but may I not consult with him, as the unavoidable necessity of the murderous Craniotomy? If my experience have any value or my tact any existence, are they profaned if I afford their aid to a poor benighted Homœopath? The application of the forceps is very simple, but not always very facile. I may perhaps be able to assist a gentleman, and relieve a suffering woman, and no woman shall appeal to me in vain for my best efforts on her behalf, and I will impose on her no hard or humiliating conditions. If my professional dignity cannot stand the shock, it must go to the wall. I must keep my conscience clear whatever becomes of my standing.

Yours obediently.

SENEX.

To the Editor of the Canada Lancet.

SIR,—In the January number of the LANCET I see a reply to a letter of mine, by Edward Clapham, in which he states that I omitted to send his previously published card. Now Sir, what are the facts:—he says he felt it necessary to make certain explanations in self-defence in order to refute certain slanderous reports that were put in circulation as he alleges by Members of the Medical Profession in Belleville, against him. This certainly is a very sweeping charge. However, this explanation that was to be a final settler to the envious croakers in the future, and to establish his reputation and at the same time to brand his enemies with the infamy they deserve, turns out to be a very lame Duck after all. It is a puerile attempt to justify the publication of a former synopsis of the wonderful career of this admirable Crichton of the healing art. However this precious document of his did not appear in any of our Town Papers until the 7th of December, and not the 12th of November

as he states. A cause that has to be maintained by the utterance of untruth must be bad indeed. Then again he says he was properly introduced by his partner; the following is a sample of his Ethical Introduction. "It will be seen by the above that I have taken in a partner, Dr. Edward Clapham, (for some years Professor of History in the Iowa State University, and formerly resident Physician in the Hospital for Women & Children Yorkshire, England,) and that from the first of July until I return from Europe in the Spring my medical business will be conducted by him in whom I have every confidence knowing him to be an educated gentleman, as well as a man of much experience in Medicine and Surgery as also a man of original thought."

I suppose this is in strict accordance with Medical Ethics, and would pass muster both in England and Edinburgh. It is to be regretted that this eminent Dr. could not have been registered sooner. It was too bad to be kept in painful suspense, in consequence of the unavoidable delay in the Registry Office, especially as he is so much in love with the system Medical Registration seems to meet his warm approval, he is so happy that such a system is in vogue. I hope it will be to his entire satisfaction. His whine about the slanders and peculiar animus of the controversy are all of his own producing and is but another illustration of the old adage that "those who live in glass houses should never be the first to throw stones." The French and German part of his precious card by his own explanation was not for effect. It was merely necessary that like the Vendors of certain Quack Medicines, the brilliant qualities and wonderful career of this Medical Prodigy should be known in different languages. Then again it looks so remarkably learned and sounds so very classical. How could it be possible for this Medical Barnum to resist the temptation? By his own showing his professional attainments from England represent him as being simply a chemist. How then could he be a Medical officer in an Hospital in Yorkshire? He detests the shop style of advertizing, no doubt of it, nevertheless his experience in Kalamazoo life has not been without its advantages. His office and its wonderful arrangements it is now generally conceded is in perfect accord with the effective wonder-exciting western Yankee style, and when it was first opened it was indeed the wonder, if not the terror of the unsophisticated crowd, especially the juveniles who resorted there to see the sights and to

hear the thrilling tales of a staff Surgeon of the United States Army, Why, Sir, the veriest Charlatan or Mountebank could scarcely use more extraordinary means to court notoriety or pander to the ignorance of the masses. He says I utterly fail in comparison with himself. I at least should hope so. If I had become so low in the scale of honor as to use such expedients to procure business as he has done and thereby disgrace a noble profession, I should expect every man of principle to frown upon me. As to his partner's business having had anything to do with this dispute it is an assumption utterly groundless. The medical men in Belleville have quite as much to do as either he or his partner and are fully as successful in their treatment of diseases. In reference to my being the mouth-piece of the medical men of the Town this is certainly a compliment I did not expect, much less deserve, knowing as I do that they are fully competent to take care of themselves and do not need my assistance.

And now, Sir, as I do not intend to follow this controversy any further and as you did me the honor to comment in rather unpardonable terms of my breach of Medical Ethics. The subject is left in your hands for adjudication with my confidence that you will do justice in the premises.

I Remain,

Yours Respectfully,

R. TRACEY.

Belleville, January 25th.

To the Editor of the CANADA LANCET.

"Leave dang'rous truths to unsuccessful satires,
And flattery to fulsome dedicators."—Pope.

DEAR SIR,—In the January number of the *Lancet*, over the signature of "Vox," I find that my correspondence, which appeared in the December issue, has been passed in review—couched under many puny sentences—some of which may be *original*—while others are acknowledged as *quotations*. The term *pathy* seems to have *disturbed* him, and my brief definition of the three sects of the profession, as they existed in Ontario prior to 1869, to have *admonished* him—so much so, as to have thrown him into a paroxysm of *irony*. This effort of mine was not set forth as an instruction to you, sir, or to him, (?) although by his frank acknowledgement, he seems to

have profited by it, which, in the end, may draw him back to the school of his first *faith*—but was intended for those who might not fully understand the distinctive features espoused by each of the three schools. Vox complains of my not giving the “*vernacular*” of my quotation from the writings of Gregory. This he should have done in his “*cram*” review. It is not customary for a writer, who quotes the words of another, to *change the language*, but simply use the phrase *verbatim*, more especially when he takes no *exception to the quotation*. As to the small “*fry*”—(I can assure you *it is infinitely small*, as regards the number of members composing it,) whom Vox has strenuously invoked to espouse his cause, they have discarded his sentiments, and are zealously endeavouring to elevate themselves to a position based upon the broad principle of *free diffusion of useful knowledge among the profession*. Finally, as a last resort, Vox speaks in rather unpleasant terms respecting my publishing in the *Lancet* the names of those who have urged the subject of fusion, stating as a reason that the “*proposition*” was never intended for the “*public*”—but for the “*Medical Council*.” Who, but a man like Vox, could express himself thus? A profession like ours, having to do exclusively with the public weal—and yet its chosen Legislative members must do business within a *circle*! Form a *ring*, and forsooth, elect him as a *leader*! What nonsense. Oh! shame, Vox! Be honest, had you not better turn your attention to the reading of *Æsop’s fables*, or ponder over the eccentricities of *Diogenes*, and to dispel your sombreness, peruse the work entitled, “*The Devil on two Sticks*,” rather than try to dictate the movements of a sect that you have neither part nor lot with?

Yours very truly,

S. S. CORNELL.

P. S.—Will some person please furnish me with the *girth* of Vox?—He appears to be a “*long-waisted old body*.”

[Dr. Cornell is altogether at sea as to who Vox is. This correspondence, however, must drop here. We would also take the opportunity of stating that in future, no letter of a personal nature, will be inserted in the *Lancet*, unless it bears the real signature of the writer. The acts of public men are open to criticism, but we think such criticism should be done openly, and aboveboard.]—*Ed.*

Selected Articles.

THE SURGERY OF THE OVARIES.

The history of the various methods of treating ovarian cysts is worth tracing. Every method of treatment may be looked upon as a form of experiment calculated to bring out some feature in the constitution of ovarian disease. The amount of knowledge thus acquired could never have been deduced from ordinary clinical observation. In this way many methods now proved to be bad have, by their failure, been of the utmost value in elucidating the many-phased characters of these cysts, and thus in leading up to the more rational and successful treatment of the present day. Tapping by the abdomen and tapping by the vagina, simple or followed by darinage or the injection of irritating fluids, the excision of a portion of the cyst and maintaining a fistulous opening, and all the various surgical proceedings anxiously tried as means of averting what was long looked upon as the last desperate resort—extirpation—may be said to culminate in this great lesson: that the radical method of ovariectomy is really safer, as well as more thorough, than all the rest. The general conclusion that logically springs from the clinical records of the last twenty years, is simply to elevate extirpation into the first rank in the treatment of ovarian tumours. All other methods have sunk into comparative insignificance; some, at best, are resorted to as palliative, expectant, or diagnostic expedients. Although tapping and iodic injections may, in certain rare cases of simple ovarian or extra-ovarian cysts, suffice for cure, just as some cases are cured by spontaneous or accidental bursting, it may be accepted as a general law that, if a patient is to be cured of an ovarian tumour, it must be by gastrotomy and extirpation. Of course, there are cases—unfortunately many—for which this proceeding is either impracticable or unadvisable. And one of the greatest as well as most difficult questions to solve is, to discriminate between cases which admit of the operation and those which do not. One rule of great practical value has been much insisted upon by Hutchinson and Barnes. It is to avoid solid non-fluctuating tumours, or only to approach them with the utmost circumspection. The solid tumours will mostly include fibroid tumours of the uterus, many malignant

tumours with extension of disease to the neighbouring parts, and extensive pelvic and visceral adhesions.

As to the period in the course of the disease to select, we may adopt, with some modification, as a principle, the dictum of Nélaton. Extirpation is to be performed at the mean period of development. At the commencement it is too soon; towards the termination it is too late.

It would be hopeless to attempt an adequate discussion of the details of the operation. Different opinions are entertained upon almost every step. The greatest variety of ingenuity has perhaps been expended upon the treatment of the pedicle. Shall it be tied? and if tied, shall the stump be kept outside the peritoneum, or shall the ends of the ligature only be kept outside, or shall stump, ligature, and all be returned into the abdomen. Shall the stump be simply cauterised and returned into the abdomen? This plan has its advocates; and, could we feel secure against secondary hæmorrhage, it would probably be the best for general adoption. But there appears to be a general consent, amongst the most experienced and successful operators, that the introduction of the clamp by Hutchinson is one of the most important practical achievements in the history of the operation. This instrument, which is simply a modification of The carpenter's callipers, has been variously modified. It may, we think, be said, although we are not going to enter on the treacherous ground of statistics, that more successful work has been done with the aid of the clamp than with that of any other mode of dealing with the pedicle. The appréciation of the modes of dealing with the pedicle, like all other practical questions, is discussed with admirable clearness and judgment by Peaslee. The general conclusion arrived at by Wells may be accepted. Apply the clamp if the pedicle be long enough and other conditions be favourable. If the pedicle be too short and thick, apply the ligature or cautery. After all that may be urged on theoretical grounds in favour of cautery or ligature, on the intraperitoneal method, reasoning and experience concur in proving that the clamp, which keeps the dangerous part outside the body, avoids the risk of hæmorrhage, if not that of peritonitis also.

We advert to one practical point discussed in Peaslee's work and not referred to by Wells. It relates to the difficult question, how to deal with adhesions. "If," says Peaslee, "the cyst proves

to be very intimately adherent to the intestines, the liver, spleen, uterus, bladder, or ureter, it should not be detached at all." And here comes the point. In cases where detachment was obviously impossible or too dangerous to attempt, the operation has commonly been given up, doing the best that seemed possible to secure external outlet for the contents of the cyst. But Atlee refused to be baffled by this difficulty. He sought to get behind it—to circumvent it. "The peritoneal covering should be separated from the fibrous layer of the cyst, and all the adherent portion left in contact with the viscus to which it is attached, as Dr. W. L. Atlee has practised for many years. In his 215th case, adhesions, seven or eight inches long, were thus left attached to the transverse colon."—(*The Lancet* Jan. 4th, 1873.)

THE SWELLED LEG OF FEVERS.—Dr. J. Warburton Begbie considers that these cases may be classified as follows:—1st, cases dependent on vascular obstruction: *a*, venous, *b*, lymphatic: 2d, cases in which inflammation of the areolar tissue exists.

Pain and swelling are the characteristic features of interrupted circulation through veins. When the convalescent from fever is either suddenly seized with pain in one of the lower extremities, or the limb becomes the seat of gradually augmenting uneasiness succeeded by swelling, together with enlargement of the superficial veins, there can be but little doubt that obstruction to the return of blood through a large vessel exists. The swelling, besides being confined to the limb, presents a very different appearance from ordinary anasarca; it does not pit on pressure, but is firm and has a brawny feeling. The color of the skin, except where the prominent veins exist, is not much changed from that of health. There is always more or less constitutional disturbance, chilliness and discomfort being present, and not unfrequently the local affection is preceded by rigors. Sometimes very alarming symptoms have occurred, implicating the heart itself. The author supposes these sudden and alarming seizures to be due to the fact that a portion of clot, originally obstructing the femoral or iliac vein on the affected side, has found its way to the right chambers of the heart, where it may be detained, or, passing thence through the pulmonary artery,

may reach the lungs. In cases due to an obstructed state of the lymphatics, Dr. Begbie has noticed a distinct enlargement of the lymphatic glands of the groin of the affected limb. Moreover, the limb, besides being swollen and firm, as in the phlegmasia due to venous obstruction, wants entirely the notable prominence of the superficial veins, and has hyaline lines in various parts—not unlike the marks over the abdomen which are observed in women who have borne children—which may be justly ascribed to dilated cutaneous lymphatic vessels.

The painless character of the swelled leg of fever when due to lymphatic obstruction, is in striking contrast with the suffering of the patient when the venous system is involved. Dr. Begbie has never known the serious results of blood poisoning, nor of embolism, nor purulent deposits in remote parts, to occur in the cases arising from lymphatic obstruction. Yet cases occur in which both systems, venous and lymphatic, are involved; in such the prognosis must be guarded.

The cases of swelled leg in which an *inflammation of the areolar tissue exists* have been especially characterized by the affection of both legs; first one and then the other becoming swollen. The swelling sometimes commences in the foot or lower part of one leg, and then, gradually rising upward to the thigh, ultimately affects the thigh of the other limb, and descends to the leg and foot. An inflammatory condition of the areolar tissue would best account for this peculiar progress. Sometimes in these cases the lymphatic system does not escape implication, and then superficial abscesses may form. Embolism and metastatic inflammation do not occur, and while purulent absorption may under some circumstances be induced, this occurrence need not be dreaded as a likely event.—*Boston Med. and Surg. Jour. from Edinburgh Med. Jour. Sept., 1872.*

A MODE OF OPERATING FOR RADICAL CURE OF VARICOCELE.—Dr. H. B. Davison, San Francisco, (*Pacific Surg. and Med. Journal*), has adopted a new mode of operating for radical cure of varicocele, for which he claims three great advantages over any other means:

First, by perforating only one wall of the scrotum, less pain, less inflammation, and less risk of adhesion of the wounded sac and spermatic cord.

Second, by placing the patient in a recumbent posture when the operation is being performed, so that no blood may be inclosed in that portion of the vein cut off from the circulation, the resultant inflammation will be much less, and the testicle will not swell so much, and absorption will be accomplished in much less time.

Third, by removing the ligature before it cuts through the vein, the risk of phlebitis is lessened, and the patient is enabled to resume his ordinary duties much sooner.

Those who have been operated on have no return of the disease, and it would require a very close examination of the parts to discover that any operation had been performed. In one case the patient had been wearing a suspensory bandage for over twenty years, and the left testicle was much atrophied. It is now about sixteen months since the operation, and the testicle has regained its normal size, and the patient has a corresponding increase of sexual power.—*The Clinic.*

GALVANIC TREATMENT OF BED-SORES AND INDOLENT ULCERS.—Dr. Hammond, of New York, recommends for indolent ulcers and bed-sores the galvanic treatment, as first suggested by Crussel, of St. Petersburg. He says: "During the last six years I have employed it to a great extent in the treatment of bed-sore, caused by diseases of the spinal cord, and with scarcely a failure; indeed, I may say, without any failure, except in two cases where deep sinuses had formed, which could not be reached by the apparatus. A thin silver plate—no thicker than a sheet of paper—is cut to the exact size and shape of the bed-sore; a zinc plate of about the same size is connected with the silver plate by fine silver or copper wire six or eight inches in length. The silver plate is then placed in immediate contact with the bed-sore, and the zinc plate on some part of the skin above, a piece of chamois-skin soaked in vinegar intervening. This must be kept moist, or there is little or no action of the battery. Within a few hours the effect is perceptible, and in a day or two the cure is complete in a great majority of cases. In a few instances a longer time is required. I have frequently seen bed-sores three or four inches in diameter, and half an inch deep, heal entirely over in forty-eight hours. Mr. Spencer Wells states that he has witnessed large ulcers covered with granulations within twenty-four hours, and completely filled up and cicatrizations begun in forty-eight hours. During his recent visit to this country, I informed him of my experience, and he reiterated his opinion that it was the best of all methods for treating ulcers of indolent character and bed-sores."—*Southern Med. Record.*

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TORONTO, MARCH 1, 1873.

AMENDMENTS TO THE ONTARIO MEDICAL ACT.

The Bill to amend the Ontario Medical Act now before Parliament, is, we think, in a fair way of becoming law. Its principal features are, first: that it gives power to the Council to hold and acquire chattel property and real estate, for the purposes of the act and power to sue and to be sued.

2nd. That any member of the College of Physicians and Surgeons, may have his name transferred from one class of voters to any other, after having passed a satisfactory examination before the Examiners appointed by the Council, on those subjects specified by the Council as peculiar to that system of medicine he desires to connect himself with.

3rd. (And this is the one to which exception has been taken by some members of the Profession). That it gives power to levy an annual assessment of two dollars each on the profession, for the support of the Council, the erection of a hall, the founding of a library and museum, &c., &c.

4th. That it makes the penal clauses more stringent and effective, and gives power to distrain and imprison, if the penalty and costs be not paid. These are the leading clauses in the Bill and they are such as are imperatively required in the interest of the Council, the Profession and the Medical students.

An amendment is also proposed by Dr. Clark, M.P.P., for Norfolk, which will permit any student who has passed the primary examination of the Council, to practice under a regularly licensed practitioner, and to be registered as an undergraduate in medicine. Such privilege to extend over a period of not more than two years, but such student shall not be allowed to practice in any of the cities, towns, villages, or old settled counties or townships of Ontario, it being intended solely as a measure of relief to newly settled districts, surveys, &c., &c.

There appears to be literally no objection to the 1st, 2nd, and 4th items above mentioned, but in reference to the taxation clause a good deal has been said *pro* and *con*. Now it must be borne in mind that the Medical Act under which the Council is working, has been in operation some time ; that the expenses of the Council and Examiners are very great ; that the source of revenue from registration is dried up, and that the whole expense of the Council and the Examining Board has to be borne by the Medical students. The students are in open rebellion against the exorbitant fees which the Council is obliged to demand of them, and they absolutely refuse any longer to bear any more than their share of the necessary tax. Matters have come to a dead lock, and the Council now wish to obtain power by legislative enactment to levy a small annual assessment upon the Profession to meet the emergency, and it seems but fair and just that the latter should bear their share. In all justice and fairness, we also think that the Government should bear a just proportion of the expenses, or grant a subsidy, as the act is undoubtedly in the interest and for the protection of the public.

The essential feature of the Act, viz., the *Central Examining board* must be kept intact at all hazards, and this cannot be done without funds. The students feel that it is an injustice, and justly too, that they should bear the whole burden of the expenses of the Council, and in this they have the sympathy of a large majority of the members of the Medical Profession.

Prior to the passing of the present Medical Act there was an average of 180 students licensed annually, and during the two years prior to the passing of the Act there were 167 Homœopaths and Eclectics licensed. Since the passing of the Act, during the three years it has been in operation, there have been only 160 students of the general profession who have received licence to practice, and not

a single Homœopathic or Eclectic student has presented himself. This is a sufficient answer to those who are continually asking what good the Council has done. The standard has been raised, and as a natural consequence there have been fewer aspirants. Gentlemen who now oppose the whole Council, seem to forget the outcry that was raised a few years ago against the Colleges, "that they were flooding the country with doctors." The Act has done good service and let us by all means see to it that no niggardliness on our part shall prevent it from carrying on its good work. Three different plans have been proposed to meet the difficulty—one is, to ask the Government to grant a subsidy. This appears to meet with little favor in the proper quarter. The second is to reduce the size of the Council and also the Examining Board. This meets with the most strenuous opposition both in and outside of the Council. And the third is to make an annual assessment upon the profession, to be fixed at \$2 each. In this way it is hoped that the Council will raise sufficient funds to enable it not only to carry on its legitimate work but also to provide a building fund for the erection of a hall and the establishment and maintenance of a library and museum. This latter is a desideratum that we have long wished for. It is not creditable to the liberality of the profession, numerous, wealthy and influential as its members are, to be without a habitation, that the Council must go begging for a hall in which to hold its meetings, and the Examiners to hold their examinations. We appeal to the liberality and the generosity of the profession in this matter. The Lawyers have their Osgoode Hall, the Apothecaries will soon have their Apothecaries Hall, but the Medical profession "hath not were to lay its head." The lawyers pay an annual license fee of \$20 per annum. The Apothecaries an annual fee of \$4, and they pay it cheerfully. We have also been informed that the members of the medical profession in the United States pay an annual tax of \$10; but some of the members of the Medical profession in Ontario, to their shame be it said, cry out against a tax of \$2 per annum. Some of those who oppose this tax say that it has not been brought before the profession. We would simply refer such to the August number of the *LANCET* for 1872, and several subsequent numbers, in which this very matter has been again and again brought under their notice, and although our columns are always open even to those who differ from us, we have not had a single letter in opposition to the principle.

Wherever any special interest has been taken in reference to the proposed legislation, resolutions in favor of the annual assessment have been carried. At a meeting of the Profession in Toronto it was carried, at a meeting of the Medicine Society of Lambton it was carried; and at a meeting of the Profession in Ottawa, it was also carried unanimously. The only real opposition has been from a few private individuals who appear to be afraid of their own shadow.

SIR WILLIAM GULL ON THE CASE OF NAPOLEON.

In our last issue we published the report of the *post mortem* examination of the body of the late Emperor of France. It appears that Sir William Gull left Camden place as soon as the autopsy was over, and was not present when the record was drawn up. He records his dissent on one point, viz. : the origin of the calculus, in the following terms :—

“ I desire to express an opinion that the phosphate of lime calculus, which formed the nucleus of the mass, was the result of prior cystitis (catarrhus vesicæ), and not the cause of it. This nucleus was of uncertain duration, and may even have been more recent than supposed in the appended report. However this may be, it was encrusted by two distinct and more recent formations of crystalline phosphate. The inner incrustation around the amorphous phosphate of lime was dense, and separated from the outer incrustation by a looser cellular but crystalline deposit of triple phosphate.

“ It seems to my judgment more in accordance with clinical experience to regard cystitis as a prior lesion, and that by extension, as is common in such cases, it affected subsequently the ureters and pelves of the kidneys. No doubt in the latter stages of the malady, the calculus became, by this formation and increase, an augmenting cause of the lesions.

“ The other facts and statements I entirely endorse.

(Signed,) W. W. GULL, M.D.

“ Brook-street, Jan. 10.”

The *Medical Press and Circular* in commenting on the conduct of Sir W. Gull in writing to the *Times* in refutation of some observation which appeared in the *London Lancet* regarding his course of action makes the following remarks :

“Sir W. Gull has thought it consistent with his position to write a letter to the *Times* in reference to some observations made by the *Lancet* and quoted in the *Times*. More surprising still, he has also informed the *Lancet* that he does ‘not think it proper that he should personally justify himself before the Profession.’ The opinion of the *Lancet* having been endorsed by ourselves and other journals, may certainly be assumed to be the opinion of the Profession. We would add now that we think it would be far more proper for Sir W. Gull to justify himself before the Profession than before the public. Whether he acted wisely or not in giving a separate opinion on the autopsy of the Emperor is assuredly more a professional than a public question. If an unknown physician had rushed into the *Times* to protest against the comments of the Medical journals as written by persons ‘imperfectly informed of the circumstances,’ it would be regarded as calling for adverse criticism. Our respect for the position of Sir W. Gull must not lead us to adopt another standard for him, and we do not hesitate to say that this last act of his needs far more justification ‘before the Profession’ than his addendum to the report of the autopsy. Anything he had to say should have been to the Profession, and he should have either addressed the Medical journals or maintained a dignified silence.”

Nearly all of the Medical journals of Great Britain have commented unfavourably upon this action on the part of Dr. Gull, the opinion being generally expressed that it was entirely uncalled for. He should either have remained to join in the consultation of his colleagues or appended his signature in the ordinary way—or omitted it altogether. The idea has been widely spread in the press, that the report affirmed the impossibility of detecting disease of the kidneys, and we think that Dr. Gull would have done more for the Profession by pointing this out than by making an addendum of his own which could serve no useful purpose.

TORONTO HOSPITAL.

“We understand that there is a petition being carried round Toronto for signatures praying the Legislative Assembly to give an additional grant to the Toronto Hospital, so as to make provision for at least a hundred or a hundred and fifty additional free patients. We are exceedingly desirous to have all benevolent institutions put on a thoroughly effective footing, and our General Hospital among the rest, but we have not so high an estimate of the past or present management of this particular charity as to wish to see any additional

grant made to its funds without a thorough re-organization of its whole internal management. It is not many months since we expressed our opinion fully on this subject. No attempt has ever been made to controvert the substantial accuracy of the statements we then put forward, and until a thorough reformation is set about, to grant additional funds would only tend to additional mismanagement. We have been given to understand that the Government has under consideration a plan for making a thorough change in the management of a charity which, upon the whole, has not been creditable to Toronto. We hope this is the case, and that such arrangements will be entered into as to give full confidence to the general community."—*Globe*.

We fully endorse the above remarks, and hope soon to see an entire change in the management. It is very desirable to have an additional grant in order to place this charity on a better footing, and to enable it to give relief to a larger number of sick poor; but at the same time it is equally desirable that such changes and additions should be made in the whole management as will secure the confidence of the community generally.

RESPONSIBILITY OF MEDICAL PRACTITIONERS TO THE PUBLIC.

We have been frequently asked to give our opinion regarding the responsibility of medical practitioners to the public. The code of medical ethics adopted by the Canadian Medical Association, and which is a transcript of the code adopted by the American Medical Association, lays down this matter very clearly and very fully. The first section states that "a physician should not only be ready to obey the calls of the sick at all times, but his mind should be attuned to the greatness of his mission and its responsibilities. These obligations are the greater because ordinarily there is no *other tribunal to appeal* to than his own conscience in case of neglect, &c." The italics are ours, and we have underlined these words to show that the framers of the code of ethics wished it to be fully understood that there is no law to compel a medical man to obey the call of a patient but his own conscience. A very general impression seems to have gained currency in many parts of the country that a medical man is bound by law to visit and prescribe for a patient when called upon,

and can be prosecuted if he refuse to do so. This, it is needless to say, is all a mistake. There is no law on the Statute Book, nor is there likely to be one, which can compel one portion of the community to do service for another under a penalty, in case of refusal; such would be an interference with the public rights of individuals, which no Legislature would permit, and no portion of the community would tolerate. If, however, a medical man makes an engagement to attend a lady in her confinement, or agrees to visit a patient on a certain day or a certain hour, then he is responsible in law, and can be prosecuted for breach of contract if he fails or refuses to go when called upon, and is held responsible for any injury the patient may sustain by reason of his neglect, unless he can show that he was unable to attend through illness or absence from home. This is a matter that, if more fully understood by the public, would be the means of placing the medical profession in a more favorable position in the community. Many medical men seem to act as if they were compelled to obey every impudent summons they receive, and take no pains to disabuse the public mind in reference to it. This is decidedly wrong. If the public were given to understand that the services of the medical man were more a favor, than a right which they could demand by a threat of proceedings, they would feel under greater obligations, and be in a position more fully to appreciate the nature of the services rendered.

REGISTRATION ACT.

We would like some amendments made to the working of the present Act referring to the registration of deaths. In the last number of the *Lancet* is a case in point, and one also of great hardship. Dr. Metherell, of Freelon, was fined in all a sum of \$54.75 for not having made a return in the case of the death of a woman residing at Strabane, in the manner provided by law. The duties of medical men, in every community, are at present sufficiently onerous without imposing such work as this upon them. It is no great amount of trouble for a medical man to fill in a certificate of death when called upon to do so by the friends, but it is quite a different thing to impose upon him the task of attending to the whole matter of registration, &c. The duty of registration of deaths

should undoubtedly devolve on the friends of the deceased. It has been suggested that the Act should be made somewhat similar to that in force in Great Britain. Under it no interment can be allowed until a certificate has been issued by the registrar. When a person dies the friends bring a printed form of certificate to the medical man, who fills it up, stating the cause of death. This certificate is then presented to the registrar, who issues an order for the interment. The law as it at present stands is very unjust towards medical practitioners; and we trust that our medical friends in the House will attend to this matter and secure such measure of relief from the Legislature, as will meet the views of the profession.

DEATH OF MR. BAKER BROWN, F.R.C.S.

The death of Baker Brown, who has been for some time a sufferer from cerebral paralysis, is announced in the British Journals. He had at one time a very large and lucrative practice, and was considered one of the most skilful operating surgeons of the age. His good fortune appears however to have deserted him in his declining years, and he is said to have died penniless. A fund was raised on his behalf by the profession of England a few months ago.

APPOINTMENT OF CORONERS.

Isaac Wesley Brown, Esq., M.D., of the village of Beachville, to be an Associate Coroner within and for the County of Oxford.

John D. Naylor, Esq., M.D., of the village of Fenelon Falls, to be an Associate Coroner within and for the County of Victoria.

NOTES AND COMMENTS.

THE LATE LORD LYTTON.—The illness (*British Medical Journal*) which terminated the life of the distinguished novelist was sudden and unexpected. He had for many years been the subject of discharge from the ear, probably attendant on disease of the bone. This had, however, at no time previously given rise to symptoms

causing much anxiety. On Thursday, acute pain in the ear and head set in, and continued until Saturday, when unconsciousness supervened, and speedily ended in death.

BLISTERS IN PNEUMONIA.—Dr. C. J. B. Williams, (Am. Prac.) in speaking of pneumonia, says :—" My experience has taught me to put great faith in large blisters, both in asthenic pneumonia and bronchitis, and I am confident that I have seen many lives saved by their means. Instead of being lowering, they give a salutary excitement to the circulation, and the copious serous discharge which proceeds from the skin tends to relieve the congested lung without wasting the blood, that is so necessary to sustain the functions, Small blisters teaze as much as large ones, and are far inferior in the relief they afford." We fully endorse the views of Dr. Williams on this subject.

ABORTIVE TREATMENT OF BOILS AND FELONS.—The following method of treating boils and felons is regarded by Dr. Simon, (*Gaz. Med.*) as almost infallible. Wherever the boil or felon may be, and of whatever size, so long as suppuration has not commenced, rub it gently with the finger wet with camphorated alcohol, pressing especially on its centre. This is to be done for half a minute at a time, and repeated seven or eight times. The part is then to be covered with camphorated olive-oil. If resolution is not brought about by one trial it may be repeated at intervals of six hours. We have repeatedly used camphorated oil in threatened abscess of the mammary gland in females, and always with good effect ; and are not surprised to learn that it has proved equally serviceable in the treatment of boils and felons.

NATURAL CURE OF DISEASE.—Professor Armor, (*New York Medical Journal*), in a lecture on the above subject, says :—there are mainly two errors which the young physician should carefully avoid. The first is in doing too little, the second is in doing too much—the frequent resort to heroic, violent, depressing and uncertain drugs. It cannot be too often repeated that powerfully-acting drugs unintelligently administered are dangerous things, The strong and successful practitioner is usually a man of few remedies.

He lays down the following rules : 1st—Never administer a powerful drug without a definite purpose ; that is, without a clear indication ; for drugs never occupy neutral ground.

2nd—Never use more medicine than is requisite to produce the effect which is intended, and continue it no longer than is absolutely necessary. It is a wise and true saying, that “it often happens to a good physician to find no indications for treatment; to bad ones, never.” He also strongly recommends *placebos*, of a palatable form when the indications for active medicine are not well marked; and whether administering drugs or not, see that the patient is put on the best possible *hygiene*.

TREATMENT OF PUERPERAL FEVER.—Dr. Charles Bell, of the Royal Maternity Hospital, (*Am. Journal of Obstetrics*), believes that puerperal fever is very similar to erysipelas. He therefore suggests similar treatment. He gives small doses of calomel and James’s powder every two hours until the bowels are freely moved, and thirty drops of Tinc. Ferri. Mur. every three hours. The vagina is to be washed out several times a day with Condyl’s fluid and tepid water, and a linseed poultice applied to the abdomen. This treatment if regularly and fully carried out, and not in the timid partial way in which many do in erysipelas and then undervalue the treatment, will give the best chance of cure to the patients.

ESCAPE OF LUMBRICI FROM ABSCESSES, &c.—Two remarkable cases of this kind are mentioned in the “*London Lancet*,” November 9th and 30th, 1872. One case occurred in the Mansfield Workhouse Infirmary. A boy, aged 13, was suffering from disease of the hip joint; abscesses kept forming and bursting about the joint, from one of which was discharged a large lumbricus about 18 inches long and coiled upon itself. The wound healed rapidly afterwards, and the lad’s health improved very much. Another case occurred in a child 10 years of age, suffering from phlegmon of the spermatic cord on the right side. Poultices were applied, and in a few days the abscess was lanced. Two days after a large worm was found on the poultice. Santonine was then administered, and was followed by the expulsion of eleven lumbrici through the scrotum; and several by the bowels. The child got better. It was subsequently ascertained that an inguinal hernia existed on the right side, from which it was inferred that inflammation and sloughing had taken place, and in this way the worms escaped. It is not so easy to understand how the lumbricus found its way into the abscess at the hip.

IODINE AS A DISINFECTANT.—Iodine may be used to disinfect the air in hospital wards, sick chambers, &c., in the following simple manner—first suggested by Dr. B. W. Richardson. Solid iodine is exposed in glass or porcelain vessels in different parts of the room. The vapor of iodine is given off at ordinary temperatures. It has proved a very efficient mode of obtaining a constant disinfection.

ASPIRATION IN HERNIA.—Attention has lately been attracted to a method of treating strangulated hernia by puncturing the sac with a fine needle and evacuating by means of an instrument termed an *aspirateur*, a portion of the contents, after which reduction is easily accomplished. There is no escape of air or liquid into the abdomen, and the puncture of the intestine is found to close immediately. The same treatment is frequently resorted to by many practitioners in abdominal tympanitis, and also from distension of the bladder from urine when the catheter cannot be passed.

IN-GROWING TOE NAIL.—This *bête noir* of minor surgery is still engaging the attention of members of the Medical Profession in different parts of the world. A writer in the *Boston Med. and Surg. Journal for February*, proposes a new operation for its relief. It consists in removing with the knife by a single stroke all the diseased parts, together with quite a large piece of the sound flesh, skin deep, from the side of the toe, sometimes making an open wound one inch long by half an inch wide. No portion of the nail need be removed; but, if in order to fully secure all the diseased flesh overlapping or undergrowing, a segment of the nail is removed, no harm can come. The wound is allowed to heal by granulation; and, as contraction of the cicatrix takes place, there is a drawing in of the skin from all sides, including of course that near the nail. The shape of the toe is also improved by the operation.

HONORS.—William L. Copeland, Esq., M.D., of St. Catharines, Ontario, passed the required examination for membership in the Royal College of Surgeons, England, on the 24th ult, and was duly admitted a member of that body.

J. B. Crozier, Esq., M.D., of Toronto University, now in London, England, has been appointed assistant Physician to the Hospital for Diseases of Women.

MEDICAL ACT FOR NOVA SCOTIA.—A Medical Bill has been passed through the Legislature of Nova Scotia, and comes into force on the 1st of May next ; one of its provisions is, that after May 1st, 1873, any person practising as a physician or surgeon in the said Province for gain or reward without being registered under this Act, shall forfeit a sum of \$20 *for every day* that he shall so practice. This appears pretty severe, and as is usual under such circumstances, it is likely to defeat itself. We are glad however to observe that the Medical profession in our sister Province is taking steps to place itself in a better position in regard to irregular practitioners.

NOTES ON HOSPITAL PRACTICE

Reported for the LANCET by Messrs Cameron & Nevitt.

CASE I. EMBOLISM AND PAGALYSIS FROM CONTINUED INTOXICATION. — R. S. æt. 37, was admitted into the Toronto General Hospital, on the 11th Sept. 1872, under the care of Dr. Thorburn. His left eye was much congested, and the whole countenance expressive of alcoholic abuse and stupefaction. His gait was dragging, his tongue protruded to one side, and there was slight paralysis of one side of the face.

He was put upon iodide of potassium and tonics, with full diet, and a collyrium of sulphate of zinc to the affected eye. Under this treatment he improved, until Oct. 5th, when he died suddenly.

Post mortem 24 hours after death.

The vessels of the membrane of the brain were injected, especially upon the right side. Brain softened and much congested on the surface ; an unusual amount of fluid in the right ventricle. Right middle lobe of cerebrum altered in structure, and very much softened, and a small clot which was found in the vessel leading to it, was considered the cause of death, as well as of the various symptoms preceding.

CASE II. AMPUTATION OF FINGERS OF LEFT HAND. — A. I. F., æt. 60, was admitted into the hospital Oct. 11th, 1872, under the care of Dr. Richardson.

The hand had been crushed by the rollers of a printing press. The index finger was completely smashed, and the integument entirely torn from the dorsal surface of the hand, while that on the palmar surface was badly lacerated. The palmar arch was not injured, and there appeared to have been no undue amount of hemorrhage.

On pinching the fingers sensitiveness was found to be present in all but the first. This was then amputated, two vessels were ligatured, $\frac{1}{4}$ gr. morphia given, and the patient conveyed to bed; the hand elevated, and cold water dressings applied.

Oct. 12th.—Doing well ; slight oozing.

Oct. 13th.—Wound dressed, pulse good, tongue foul.

Oct. 14th.—Appetite poor ; tongue foul.

Oct. 16th.—Complains of a great deal of pain in the hand. To have dressings of boiled linseed oil and carbolic acid.

Oct. 17th.—Very restless, and in much pain ; a poultice applied to the back of the hand ; 20 grs. chloral hydrate to be taken as required.

Oct. 18th.—To-night patient became delirious ; on the following morning was quiet, but at night he became worse.

Oct. 22.—Doing well ; delirium all gone ; has slept well each night ; middle finger unhealthy looking.

Oct. 30th.—The middle finger is quite gangrenous and black, and was consequently removed ; otherwise doing well.

Nov. 2nd.—granulations looking flabby ; to be dressed with *Lotio Rubra*.

Dec. 19th.—The granulations being in a healthy condition, three grafts were put upon the dorsal surface, and a narrow strip of plaster put over them, and ordered to remain for 24 hours undisturbed.

Dec. 21.—All the grafts took, and the surface is healing up nicely.

Discharged Dec. 25th, 1872.

Case III. TREPHINING.—M. D. æt. 22, admitted into the Hospital Oct. 22nd, 1872, under Dr. Bethune's care. He had received a kick from a horse on the left side of the head, near the junction of the frontal and parietal bones. The right side was paralyzed, the tongue could be protruded, but could not be moved to the right side.

Oct 24th.—An incision at right angles to the wound already existing was made, about one inch in length, the trephine applied, and several large pieces of bone that were pressing upon the brain, were removed, and several pieces raised. The lips of the wound were brought together with silver wire sutures, and weak carbolic dressings applied. Ten hours after the operation the pulse was slow and full ; $\frac{1}{4}$ gr. morphia was given.

Oct. 25.—During the night, patient pulled off the dressing and strapping, which caused a little bleeding ; patient restless, no dressings could be kept upon the head, which was tossed from one side to the other continually. A dark coloured elevation was noticed at the upper corner of the wound, pulsating, and covered by the dura mater, which exuded slightly ; a great deal of discharge came away from the wound

Oct. 27.—A poultice was applied to the head. 28th—Poultice discontinued, and slight pressure instituted, with a pad of lint and bandage, to endeavour to overcome the *hernia cerebri*.

Oct. 29th.—Hernia increases, and the wound very offensive.

Oct. 30th.—Had two involuntary passages from the bowels to-day.

Oct. 31.—Sleeping the greater part of the day ; breathing stertorous, and saliva trickling from the corner of the mouth ; the pupil of the left eye very much dilated, and of the right contracted ; hernia protruding about the size of a hen's egg.

Nov. 1st.—Breathing very rapid, 60 or more expirations per minute.

Nov. 2nd.—Died in the afternoon.

Post mortem.—A portion of the inner table, about the size of a 5 cent piece, at the anterior inferior part of the wound, was found pressing upon the brain. Dura mater intensely congested, and numerous firm adhesions, especially on the left side. Brain substance very soft, and from the wound, as deep as the corpus callosum, completely disorganized.

Case IV. TYPHOID FEVER.—D. F. æt. 20, admitted into the Hospital Nov. 13th, 1872, under the care of Dr. Geikie.

Patient pale and thin, wore an anxious expression of countenance. States that on the Saturday before his admission, he felt very

unwell, vomited, legs swelled, and thick rash came out over the m. About a week afterwards, the same kind of rash came out over his body and arms.

There is slight pain on pressure over the right iliac fossa, and a good deal of diarrhoea; the rash still remains in blotches purplish red, and does not disappear on pressure; temperature $95\frac{1}{2}^{\circ}$, pulse 120; skin dry; tongue dry and brown. He was put upon the ordinary fever mixture, with plenty of milk, beef tea, and stimulants.

Nov. 16th.—Vomits, especially at night, a quantity of dark looking matter; diarrhoea increasing; ordered tannic acid and plumbi acetas.

Nov. 19th.—Diarrhoea checked; no vomiting since last night.

Nov. 22.—Temperature 100° in the morning; diarrhoea set in again. To have the following \mathcal{R} . Bismuth trisnit \mathfrak{z} ij, creta prep. \mathfrak{z} ss. tr. opii \mathfrak{z} ss. aqua ad \mathfrak{z} viiij. A tablespoonful three times a day.

Nov. 26th.—Improving; diarrhoea checked; petechial spots have nearly all dissappeared; complains of great pain in his joints, which are swollen. He was treated for rheumatism for a few days, and these symptoms disappeared, the legs still swollen; his urine was tested and found to have albumen in it.

Dec. 6.—This morning a suspicious redness and puffiness was noticed over the left eye, which continued to spread until the whole head and face were swollen puffy and red, both eyes being completely closed. Tr. ferri perchlor. to be painted over the face.

Dec. 7th.—Swelling in face and head somewhat less; arms and legs puffy and pitting on pressure; urine scanty and albuminous.

Dec. 9th.—Petechial spots and diarrhoea both appeared again; tongue dry and coated; pulse quick. Ordered to resume the former treatment.

Dec. 10th.—Spots disappearing, and diarrhoea checked; swelling is also going away. He continued to improve until —

Jan. 3rd 1878.—He complained to-day of chills, and felt cold the chills being followed by flushes of heat; ordered quin. sulph. grs. iij every 4 hours; urine very dark and thick, appears to be no scarcity of it; has several large bed-sores and an abscess over the right iliac spine, which was opened, and a quantity of pus escaped. From this time he gradually recovered, and was finally discharged cured on the 12th Feb. 1873.

BOOKS AND PAMPHLETS RECEIVED.

CONTRIBUTIONS TO MENTAL PATHOLOGY, by J. Ray, M.D. Boston : Little, Brown & Co.

This is a very interesting book, and well worthy of a careful and attentive perusal. It cannot be said to be a systematic work on Insanity, yet it treats of some subjects in a very full and lucid manner. *e.g.*, The causes of Insanity, Delusions, and Hallucinations, Confinement of the Insane, Management of Hospitals, &c. The history of several cases of feigned Insanity is given at length, and a very interesting chapter on Shakespeare's delineation of Insanity closes a volume, of about 550 pages. Most of the articles contained in the work have already appeared in various Journals, especially the American Journal of Insanity; and they are now published in book form.

REPORT OF THE MEDICAL SUPERINTENDENT OF THE LUNATIC ASYLUM, TORONTO.

REPORT OF THE MEDICAL SUPERINTENDENT OF THE LUNATIC ASYLUM, LONDON.

VACCINATION BY DR. H. A. MARTIN, OF BOSTON, MASS.

Dr. Martin is a strong advocate of the use of Bovine Virus. A large number of healthy young heifers are kept constantly on hand, and he is therefore able to produce a regular and constant supply. He has given up general practice entirely, and devotes his whole time to the business. He is deserving the support and confidence of the profession at home and abroad.

OUR FIRESIDE FRIEND—*The Standard*, one of the leading religions weeklies of America, says :—

"CUTE."—This is the title of a fine oil chromo (printed from sixteen stones) which the enterprising publishers of *Our Fire-side Friend*, Messrs. Waters & Co., of Chicago, give to every yearly subscriber to the paper. Price, \$3.00. The picture is really a fine one, and would undoubtedly retail in the art stores for \$10. *Our Fire-side Friend*, though less than two years of age, is, we learn, an established success, and is, we believe, the first successful literary paper in the West.

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EXTENSIVE ABSCESS OF THE ABDOMINAL CAVITY.

BY P. C. CONSTANTINIDES, M.D., M.R.C.S. ENG., TORONTO.

On the 6th of last August, I was called by Mr. B., of this city, to see his wife, who was, said he, "in the last stages of consumption." On my way to his residence, he informed me that Mrs. B. had been suffering from "disease of the lungs" for over a year, and that she was now so far gone that her medical attendant—a leading homœopathist—on his last visit, gave them plainly to understand that Mrs. B. could not recover; indeed, that she could not possibly survive many hours. He had not called to see her since, and during all this time, that is, 48 hours, it was most distressing to witness how slowly she was sinking, and, though barely alive, there she was lingering yet.

On my arrival, I found the house filled with Mrs. B.'s numerous friends, who had all collected to be with her during her last struggle. I was led by noiseless steps and tearful eyes to a darkened chamber, where, beset by her nearest relations, I found the object of my visit. She lay on her back, sunk in the centre of her bed, covered with a blanket; and although the heat of an August afternoon was oppres-

sive, her hollow features wore an air of uncomfortable chilliness. Her eyes, partially closed, were sunk deep into their sockets; her nose pinched, and deathly pale; her lips bloodless, and, parted slightly, they exposed the tip of her dry, glazed tongue, protruding between her teeth, thickly encrusted with sordes; the whole of her wan countenance was bathed in cold perspiration; her breathing was bronchial and very slow; her pulse imperceptible; her voice had failed days ago; her right side was paralyzed; her mental faculties appeared to be intact, although, from utter exhaustion, she could hardly see or hear, or intelligibly whisper her wishes. On lifting the coverlet, her terribly emaciated form was, exposed to view—I use the words in their strictly literal meaning—a *living skeleton*. She held her fleshless thighs flexed, resting the sharply defined condyles of the femora on her hollow abdomen; the tibiæ and fibulæ of the legs, with their overlying integument sunk deeply between them, doubled over the thighs; her feet, resting on a pillow. Over the umbilicus, a small piece of lint covered the orifice of a sinous fistula, which, on lifting the dressing, gave discharge to a profuse flow of thin, yellowish matter, horribly foetid, yet distinguished by that indescribable odour peculiar to discharges from abdominal abscesses. Simultaneously with the outgush of the discharge, a rigor, a deathly pallor and a distressing sensation of nausea overcame the failing patient; and these symptoms, I was assured by the nurse, were invariably marked whenever the sore was dressed.

From Mrs. B.'s mother-in-law, an intelligent and observant lady, who had been with her more or less during all her illness, I gathered the following particulars of the case:

On the 18th of June, 1871, Mrs. B. was confined of a healthy male child—her third. During that confinement she flowed profusely, and subsequently appeared daily to be losing strength without any apparent cause. Presently a slight swelling made its appearance in the neighborhood of her “stomach,” while the slightest effort to exert herself, or even to rise from her bed, caused a sickening pain in the tumor. The swelling gradually appeared to extend itself all over the abdomen, which also became more and more tender to the touch. There were now periodic chills and fever, accompanied with distressing nausea and vomiting. As the more alarming of these symptoms gradually subsided, the swelling about the abdomen, and the general puffiness all over the surface of

her body, became more prominent. Now this unaccountable fulness was at first mistaken for *fat*. As things became more clearly developed, Mrs. B.'s disease was pronounced to be *general dropsy*. Her health steadily continued declining, the "general dropsy" appeared to become more and more confined to the abdominal region, while the attacks of rigor and fever increased every day in frequency and duration. Mrs. B. was now given to understand that her malady had taken the form of *intermittent fever*, for which, after she had been treated fruitlessly for a while, she was advised to seek relief in change of air. Accordingly, with a good deal of difficulty, she was taken to some country place, where, soon after her arrival, she had the misfortune to fall from a carriage, and sustain some internal injuries. From that moment the "swelling about her stomach," which up to this time continued daily to grow, though very slowly, increased rapidly in size, and in a few days it was apparent that the gathering was "coming to a head." A physician who was called in thought proper to lance it, giving discharge to a large quantity of matter. The discharge continued to flow for a week or so, when the abscess was closed, and the fearfully emaciated patient began once more to cherish some renewed hopes of convalescence. But her hopes were only doomed to a speedy disappointment, for the tumor gave evident signs of renewed growth again, and in six weeks it spontaneously burst open, giving exit to a deluge of thin, greenish matter, much more in quantity than at first. Mrs. B.'s spirits as well as strength sunk now to the lowest ebb, and she was carried back home to die. Her original physician was called once more to her assistance, and although he kindly exerted every effort to make her as comfortable as possible, he decidedly could give her no hope of recovery, as her protean lesion had now taken the most hopeless of all turns, namely, that of *pulmonary phthisis*; while the unexpected prolongation of her miserable existence was ascribed to the constant draining of her decaying respiratory apparatus through that "lucky safety-valve" which nature had so kindly provided for her in the form of a fistula; which circumstance sufficed also fully to explain the reason why—according to Mrs. B.'s irrepressible query—she alone of all her fellow-sufferers of the same malady with herself, did not cough and expectorate? And so deeply was the importance of that drain to her miserable existence impressed upon her mind, that I found it the hardest task, in my

after-treatment, to induce her to submit to some measures whereby we might dry up that horrible "safety-valve!"

I have already described the condition in which I found my patient, when I was first called in to see her. To any one acquainted with scenes such as this, her case at first sight could, certainly, promise no hope. Terribly exhausting as her disease was, however, one moment's observation sufficed to fully convince me that one-half, at least, of this fearful emaciation was to be ascribed to sheer starvation. Of so delicate a nature was the potency of the medicines which she had hitherto been taking, in infinitesimal doses, that the very simplest and most wholesome articles of food were "incompatible" with them, and accordingly they had been as strictly prohibited as they had been faithfully eschewed; so that when I proposed—as the only expedient I could then recommend which might prove of some use to the dying woman—that her parched lips and mouth might be moistened now and then with a few drops of brandy and water, her horror-stricken nurse could hardly be persuaded to administer what she had been taught seriously to consider as fatally antagonistic to the virtue of the last few drops and globules which she had given the patient shortly before my arrival. But there was no time to be lost; a drowning man will catch at straws; and she, with a trembling hand and fearful countenance, went about in the execution of my suggestion. Having done this, I directed her to lift up some of the blinds, to let in more light. All friends present, but one, were kindly requested to retire from the crowded chamber, and having made everything about her as cheerful and comfortable as possible, I left, with a promise to return in a few hours, expecting only, however, to find the dying woman beyond the need of human aid.

On my return, I was surprised to find that my patient was not only still living, but also presenting symptoms of decided improvement. In fact, the very small quantity of the stimulant she had taken, seemed certainly to have had so beneficial an effect, as sufficed to determine me there and then that my patient would and should recover. During the first few days, she was kept alive by the unwearied perseverance of her friends, who kept feeding her with drops of stimulants. As soon as she was able to swallow nourishment or medicine in sufficient quantities, she was put on a liberal diet, including every article of wholesome food she might relish; while

iron, quinia, arsenic and the principal vegetable bitters were steadily exhibited, with the most beneficial results. Her profuse sweats speedily yielded to the mineral acids. As dressings for the abscess, carbolic acid, iodine, tannin and the sulphates of copper and zinc, answered every purpose. Her bowels, which, up to this time, seemed to have been in a state of chronic congestion, were relieved by means of opium; while her almost unquenchable thirst was gratefully allayed with small draughts of claret, and lime and lemon water.

One of the chief and most embarrassing difficulties I had to contend with, as soon as my patient was able to stir herself, was her utter inability to extend her doubled-up lower extremities, which, for weeks and months together, she had been obliged to keep bent up, in order to maintain her abdominal muscles in a state of constant relaxation. The wasted flexors of her legs seemed to have had their rigidly-contracted tendons fixed immovably within their sheaths. The slightest attempt at passive motion, though made ever so gently, put her in a state of fever, followed by an attack of alarming faintness, out of which it was no easy matter to restore her. It was therefore found expedient to have the stiffened joints rubbed, two or three times daily, with emollient liniments, and wrapped up in flannels, and, after a while, various sorts of splints were used to maintain gentle and gradual extension. By these means, with an infinite amount of patience on the part of her friends, she regained the use of her legs. When she was sufficiently strong to be lifted up from her bed into an easy chair, it was found that the attempt to maintain the erect, or even semi-recumbent posture, caused her internal pain, or "dragging down" as she called it, in the site of the abscess. As she gained in strength, in the course of time this difficulty was finally overcome, by means of proper abdominal supports.

I met Mrs. B. the other day, taking a walk on King-street, and her answer to my question regarding her health, was, "I feel, now, better than ever in my life."

NOTES ON SURGERY.

BY J. H. GARNER, M.D., LUCKNOW.

CASE 1.—AMPUTATION OF THE HAND.—Mr. McD. came under my care last June. He had, prior to this, consulted my friend, Dr. McCrimmon, who had told him that he was suffering from a malignant tumor of the metacarpal bone of the middle finger. He then sought relief from a “cancer doctor,” some twenty miles from here. At the end of a few weeks he returned, and asked my advice. The hand was now quite powerless; the metacarpal bones of the index, middle and ring fingers were denuded and protruding, detached from the phalanges; wrist joint and carpal bones seriously involved. I operated, by removing the hand, and in a short time he returned home as well as could be expected.

REMARKS.—There was nothing in the operation more than ordinary; but such cases as this, and others of a similar nature, show very clearly that the public really require protection, more than the medical profession. The law, as it is at present, is useless as a means of protection, and stands much in need of amendment. If this patient had been properly treated at an early period, the hand might have been saved. Here we have a quack “cancer doctor,” without any qualification or knowledge of disease whatever, who entirely ignores the medical profession and its rules and regulations, practising upon the credulity of poor, confiding patients, and there is apparently no law to prevent it—no penalty—no redress.

CASE 2.—AMPUTATION OF THE BREAST.—Towards the end of January, 1872, Mrs. J. G., of this neighborhood, came under my care, with undoubted and well marked symptoms of cancer of the right mammary gland. There was no complication whatever of the axilla or other parts, as far as we could see. She was about 40 years of age; of spare habit; has been 18 years married; had no children; complained for some time of derangement of the stomach and general debility, biliousness and nervousness. The ovaries were slightly enlarged, but there was no functional derangement of these organs. Several medical men in this vicinity were called in consultation, and we all agreed that the sooner the breast was removed the better.

I was requested to operate, and the patient was placed under my care for some time previous to the operation. Drs. Tamlyn, McCrimmon and McKay assisted me. The patient was brought fully under the influence of chloroform, and, having previously marked the line on which to make the incision, I proceeded to remove the gland. The time occupied in the operation did not exceed eight seconds. There was scarcely any portion of the pectoral muscle excised; the hæmorrhage was slight, not exceeding one, or at most two, ounces. I left the wound open for about twenty minutes after the arteries were tied, as is my usual practice, so as to be thoroughly satisfied that no more arteries required the ligature. The atmosphere is undoubtedly the best styptic for freshly incised wounds. The wound was stitched and dressed, and the patient placed in bed. Her recovery was exceedingly rapid. She had no recurrent bad symptoms, and, in a fortnight, rode home six miles in an open sleigh, quite convalescent. The breast was removed in January, and in the following April she did her usual household work. Not the slightest unfavorable symptom has yet occurred, and I hope never may.

REMARKS.—As a historical record, Galen was the first who has mentioned excision of the mammary gland. The operation was performed in the following manner:—An incision was made at the base of the tumor, and immediately seared with a red-hot iron. Incision was made after incision, and red-hot iron applied after red-hot iron, till the barbarity was brought to a close. Yet we, who know so much better, need not boast. It was life against death, and the ancients chose life rather than death, just as medical men and their patients do to-day, and with the same objects in view. The Arabian physicians of the days of Harounal Raschid were far in advance of those of Charlemagne in surgery. They used a toothed forceps to hold the breast, and cut it away with a species of scissors; they also used torsion to arrest hæmorrhage, as well as ligatures and cauterization. We can thus trace the mental effort towards improvement, in this one operation, over a space of 1750 years. Little is known about the surgery of the dark ages. In Edinburgh, in 1820, under the best skill of the day, it required an hour and three-quarters to remove the mammary gland, and it was considered a brilliant operation at that. In 1844, I was present when the late distinguished Mr. Syme took half-an-hour to remove

the mammary gland. It has been my lot to remove the breast a number of times. In some of my earlier operations, I occupied at least twenty minutes. The idea then was extreme caution, lest some artery might be cut too close to the thorax, and, retracting within the cavity, bleed so as to cause death. In all operations, it is of the greatest importance for the surgeon to gain the complete confidence of his patient. This may usually be secured by a little friendly intercourse prior to operating; it paves the way for ultimate success more than by the most skilful treatment, where confidence is absent.

CASE 3.—EXTIRPATION OF THE EYE-BALL.—I was requested by Mr. P., of Kinloss, to see his child, a little girl about five years of age, who had disease of the right eye. On examining the orbit, I found a tumor pressing the eye from behind, forwards, and causing intense pain. I suspected it was a fungoid growth. Dr. McCrimmon concurred with me in the diagnosis, and we agreed on immediate extirpation. Chloroform was administered, the lids widely separated, and a strong pack-thread passed through the eye. The globe was then removed, and along with it a tumor as large as a walnut, which surrounded the optic nerve. At the suggestion of my friend, Dr. McCrimmon, I also removed the lachrymal gland. The operation was followed by rather copious hæmorrhage. When the flow of blood had subsided, we carefully cleansed out the cavity, and found two small tumors, as large as hazel-nuts, situated on the orbital plate, near the internal canthus. These were removed with care, and also all that was practical of what surrounded the optic nerve, and we thought nothing was left of the tumor. The eye was dressed and the child sent home; it soon healed up. She did very well for about six weeks, and played as usual with the other children. I was shortly after requested to see her, and found the cavity filled and protruding, and the upper lid red, inflamed and tumid, with numerous dark vessels over the surface. The other eye was now involved, accompanied with all the former symptoms, but in a much milder form. She gradually sank, and in about four months after the operation, died, quite comatose, evidently from compression of the brain. The eye protruded very much, and became nearly sightless. Opiates and palliative treatment gave but little relief. The parents wished me to remove this eye also, but I did not consider such action justifiable, as it would almost to a certainty have ended fatally.

CASE 4.—EXTIRPATION OF THE EYE-BALL.—A short time after the death of Mr. P.'s child, I was sent for by Dr. Tamlyn, of Wingham, to see Mr. T. I., of Morris township. He was about 27 years of age, and in full vigor of life. The right eye-ball was much protruded, and vision, although not gone, yet very indistinct. There was a large tumor, nearly filling the orbital cavity, especially towards the external canthus. The lids were swollen, but not red; pain very great, especially towards morning; but otherwise the general health was good, having a fair appetite and resting well in the early part of the night. We agreed to operate, and were assisted by Dr. Scott, of Bluevale. The tumor was very large, and I had to make an incision fully two inches long, towards the temple, from the external canthus. I had a great deal of trouble in removing the contents of the orbit, especially the lachrymal gland. The tumor was fungoid, and very dense for such, which we attributed to the pressure. The bleeding was profuse. The orbital cavity, when cleansed of blood, showed that a portion of the growth enshrouded the optic nerve, and was with difficulty detached. The gentlemen present were unable to discern any remains of the tumor, after the operation; and we all made diligent search, clearing away every particle of blood, and sponging freely, whilst we examined carefully with a good pocket lens. The eye-lids did not seem to be implicated in the least, merely a little swelled. When the patient first took chloroform, the pulse suddenly rose, and his countenance became very flushed; but just before we had completed the last survey of the parts involved, his features turned cadaverous, and we gave a little brandy. He had no disease of the heart that we could discover, nor could the loss of blood account for it. He revived quickly, however; we closed the lids, and applied a rag dipped in water, keeping it in its place by a bandage, gently applied. I gave orders to his friends to renew it as often as it became dry. A quarter of a grain of sulphate of morphia was administered, and he passed a good night. In a few weeks he was able to be about, nearly as well as usual, and even helped his brother in the field. He was under the care of Dr. Tamlyn during his convalescence. I saw him about six weeks after I had operated, and I then noticed that the eye-lid was red, tumid and streaked all over with dark-colored veins. About the beginning of October, I was again sent for to see him, and both he and his friends were anxious for me to

operate again, as they all said he had received such wonderful relief after the first operation. After carefully examining the eye, we found the adjacent parts so much involved, that my colleagues and myself considered it useless to operate; and I stated that it was my conviction that the left eye-ball was also affected, in which the others concurred. The friends were extremely grieved upon hearing that we declined to do anything more than use gentle lotions and soothing treatment. A few days afterwards he went to Toronto, to obtain further advice. I am not aware what medical man he consulted, but he was told the truth, and recommended to return home, which he did. The left eye now became rapidly worse, and in a few weeks was fearfully protruded; but the pain was not so great as with the right. He died about Christmas.

Before Mr. I. came under my care, he had gone to Toronto and was treated by some one who advertised, in some of the daily papers, as an "eye doctor." Upon his return home, Dr. Tamlyn told him that he was suffering from fungoid tumor of the orbit.

REMARKS.—In comparing these two cases of extirpation of the eye, and their termination, many grave points naturally arise. The operation was as successful for a time as possible, and the relief experienced by both patients very great. In neither case was an atom of the diseased mass left, that could be found. The eye-lids, at first, were not involved, and exhibited nothing for many weeks after the operation, of a malignant character. Both orbits filled up well, and for a time everything did prosperously. Then the opposite eye followed in precisely the same stages as the other, and death terminated both cases. What is the seat of origin of the tumor? After considering the circumstances carefully, I should suppose it to be in the cranial cavity. If it were located in the cavity of the orbit alone, it is not reasonable to suppose that, after complete extirpation, the same disease should attack the other eye. The nerve was completely surrounded by the tumor in both cases, as far as I could remove it, and I went as deep as I dare go, and also made every search I could. The growth seems to run along the sheath of the nerve of one eye first, and then to follow that of the other. It is a remarkable fact that only one eye seems to be attacked at once, as in these cases before us. I was anxious to make a *post mortem* examination, but the friends would not allow it.

In a case of malignant growth of the orbit, is it justifiable to

extirpate? If the malignant disease is situated in the eye-ball, I should not hesitate. The sooner it is removed, in my opinion, the better. If the growth is so confined, there will not be much likelihood of its involving any of the surrounding tissues, and the prognosis would be more favorable. But if the tumor involves the tissues surrounding the eye-ball, it may be asked, What is the benefit of operating, or is it a case for the knife? as death is almost inevitable in a few months. Judging from what we have seen, I should say extirpation of the entire contents of the orbital space is imperatively demanded, for the following reasons:

1. The patient suffers intensely, and the relief obtained for the time is great.
2. Life is prolonged for some months.
3. The second attack is not so severe as the first.
4. Although death is certain, yet it comes in a milder garb.

In conclusion, it might be asked, Would it be justifiable to extirpate both eyes? This question is not easily answered. We see that great relief is afforded by removal of one eye, and life would likely be further prolonged; and although complete blindness is a great sorrow, yet the love of life is a keener desire. As a general rule, however, I must say that in such other cases as I have seen and treated, extirpation of the orbital contents is very unsatisfactory, the termination being generally fatal. I have twice extirpated the eye most happily. One case was in consequence of the organ being destroyed by the bursting of a gun, and the other by a blast in a rock that exploded sooner than was expected. A fragment ruptured the eye-ball, and fractured the zygoma. Both patients lived for years after. Yet it is a well attested fact, that when one eye is injured by a blow or other violence, the second often sympathizes so keenly, that total blindness is the result.

TREATMENT OF BURNS.

BY P. V. DORLAND, M.D., L.R.C.P. LOND., L.R.C.S. EDIN., BELLEVILLE.

The Grand Trunk Railroad, as usual, met with a disaster, on the 21st of June, 1872, in which some seventy persons were severely burned. I need scarcely remark what so often has been observed as a consequence of extensive burns, that there is the most serious constitutional disturbance. We all know that the extent of surface

burned, the locality, and the age of our unfortunate patients, have much to do with its severity, and the fatality. We have all observed, probably, that the most fatal period is the first week after the accident. In 50 reported cases, 33 died before the eighth day, 27 before the fourth day, and hence the importance of thoroughly comprehending the primary treatment and of modifying the after treatment as indicated. During the intense smarting pain we are admonished to act promptly with the most efficient means at our disposal, for if this excitement be too long continued we may have complete collapse or if not so serious an end, we may have, during this stage, congestion of some of the vital organs, and, at a later stage, perforation of the bowel from ulceration. By cutting short the pain we lessen the duration of the first stage, and the evil consequences of weakened nervous force and diminished circulation. By acting properly at this stage, we lessen the danger at the second stage, or that of re-action and inflammation. How often have we seen cerebral symptoms arising during the first stage, and, no doubt, at this stage also, begins those causes which result in perforation, a very common occurrence in the later stages. To relieve the smarting we simply require cold water and *tr. cantharides*; \mathfrak{zj} . of the latter to a gallon of water. This will relieve it in a few minutes, or cold water will do it alone, but requires a much longer time.

Mr. W. came under my treatment about 36 hours after the accident. He was the most severely burned of any, with the exception of some eight or ten that died the first day. None survived, that had the same extent of surface burned. I found him with scarcely any perceptible pulse; the surface cold as death; intellect clear, but indifferent to his fate. Internally I ordered him warm beef tea, with eight drops *tinct. capsicum* every hour; brandy, milk, and water, equal parts, with plenty of sugar and eight drops of *capsicum* every two hours, and this was continued until re-action set in. At this time I gave him *quinia sulph.* and *pot. chlor.* in small doses, with two drops of *tr. aconite* every two hours. I diminished the brandy, but continued the *capsicum*, milk and beef tea every three hours. On the sixth day I gave him turpentine emulsion 4 or 5 times a day. In this way I supported him and prevented too sudden a re-action, and, I have no doubt, limited the ulcerative process, so very common in the bowels after burns. Locally I ordered flour of slippery elm, mixed with olive oil and a very small quantity of

carbolic acid, and after it was thoroughly applied I applied a bandage where applicable, with several objects in view. 1st. To equalize the circulation. 2nd. To prevent excessive granulations, and if they did arise to absorb them. 3rd. To protect the parts more effectually from atmospheric influences. 4th. To maintain their normal temperature as far as possible. 5th. To prevent determination of blood to the burned surfaces. In the third stage Wood was treated by Dr. Clapham alone, as I was in Europe, and the doctor conducted him safely through. Four others were treated, in the same way, by myself and Dr. Clapham, with uniform success.

COMPOUND COMMINUTED FRACTURE OF THE SKULL, WITH LACERATION OF THE DURA MATER.

BY H. MCNAUGHTON, M.D., ERIN.

J. H., the subject of the following observations, is about 32 years of age; sober and steady in his habits, and has a fair education. On the 26th of July last, when engaged in finishing a barn, he received a blow on the head from an axe that fell from the top of the building. As soon as he felt the stroke, he made several irregular movements, and tried to get out of the building, but staggered and fell on the floor. I saw him about two hours after the accident. He had lost nearly a quart of blood, and there was a good many small portions of cerebral substance scattered over the barn floor. Pulsations 48, and respirations 14 per minute. He protruded the tongue with difficulty, and answered questions indistinctly. There was complete paralysis of the right arm; he could not move the right leg; but there was some sensation in the foot; the bladder retained its contractive power.

On examination, I found an incised wound, about four inches in length, extending forwards to the coronal suture, one inch to the left of the middle line; and backwards and outwards, to a point about two inches from the inter-parietal suture. There was a solution of continuity in the bone, and the superior portion was depressed, and apparently under the corresponding part of the opposite side for about three inches. At the anterior part of this depression, there was a well marked oval indentation. With the concurrence of my colleague, Dr. Munro, of Fergus, I made an attempt to raise

the bone, but without success. A considerable quantity of clotted blood and cerebral substance came away.

On the following morning, the pulse was about 44 ; his general appearance was much the same. With the assistance of my colleague, I took out a disc of bone with the trephine, and elevated the depressed part. We removed a depressed fragment at the anterior part, about one inch long and one-quarter of an inch broad on the outer table, and about twice those dimensions on the concave surface. Immediately beneath this fragment, there was a laceration of the dura mater. On introducing my finger through this opening into the brain, I detected the end of a spicula of bone, at a considerable depth. After a little manœuvring, I succeeded in getting it away with the forceps. It was very sharp at the extremity, and about the size of a twenty-cent piece. A considerable quantity of the grey cerebral matter came away during the time I was occupied in getting away the fragments. We removed the clotted blood as carefully as possible, and put one stitch in the wound. The patient was kept quiet, in a dark room, and ice and iced-water applied, in cloths (frequently renewed) to the affected part. He vomited shortly after he was put to bed.

On the following morning, his pulse was 52, and his general appearance good. He improved steadily ; the pulse gradually rose to the normal standard ; the wound kept clean, and there was no bad odor, although the weather was very warm. The ice was kept on about twelve days ; after that time the cloths alone were used, dipped in cold water. The wound was closed at the end of the third week. The paralysis disappeared by degrees, and, about the end of the fifth week, he began to go about with the aid of a stick. He can walk with ease ; bring his hand to his mouth, or place it on the back of the head ; he eats well ; sleeps well at night, and is perfectly free from headache. He reads distinctly, and can calculate with readiness. His memory appears to be as good as it was before the accident. He lost at least one ounce of brain substance, but there does not appear to be any change in his intellectual or moral faculties. The stitch was removed on the second day.

It is generally better, in cases of this kind, to leave the wound open. The danger is not so much in what we see, as in what takes place where the eye cannot reach. The retained exudation is a frequent cause of inflammation ; and the tension of the parts, caused by

the sutures, has no small influence in the same direction. My experience leads me to look on ice as an agent very much superior to weak solutions of carbolic acid, in the treatment of injuries of the head. I used no medicine during my attendance, beyond a mercurial purgative, and an occasional seidlitz powder.

CASES IN SURGERY.

BY T. N. REYNOLDS, M.B., ORION, MICHIGAN, U. S.

CASE I.—ABSCESS OF THE LIVER.—W. G., æt. 21 years, of robust habit, was injured on the 28th July, 1871, by the upsetting of a load of hay while passing over a bridge, by which he was precipitated to the bottom of the ravine beneath, a distance of about 30 feet. No bones were broken, and he recovered well from the shock; but enteritis set in, for which he was treated by Dr. D. F. Stone, and he so improved as to be able, on the 22nd August, to be removed to his home, which was within the limits of my visiting practice. Soon after his arrival at home, I was called to see him, and found him suffering from severe intra-abdominal pains, affecting the liver as well as bowels. After fomenting the entire abdominal region with turpentine fomentations, moving the bowels daily by enemata, giving turpentine emulsion, and anodynes when the pain was severe, and keeping him upon bland and nutritious diet, he soon improved and became quite strong and fleshy.

On the 14th December, I was again sent for, and found him suffering excruciating pain in the liver, and more or less pain and tenderness over the entire abdomen. I used hot turpentine fomentations over the hepatic region, and otherwise treated him somewhat as before. On the 24th December, I noticed slight fulness over the ninth and tenth ribs; pulse 120; skin dry; tongue covered with white and red patches alternately. I stated to the patient and his friends that I thought an abscess was forming in the liver.

At each daily visit, the fulness over the liver seemed increased, and as the patient's strength was failing and I feared the abscess might burst into the abdominal cavity, I proposed an operation, and obtained the consent of the patient and friends; and on the 30th December, in presence of Dr. D. F. Stone, without giving an anæ-

thetic, lest violent movements of the body or vomiting might cause the abscess to break internally, I cut down obliquely upon the ninth, tenth and eleventh ribs, in the lateral thoracic region, and passed a trocar and silver canula to the depth of about two and a-half inches from the surface, over the upper border of the tenth rib, into the abscess; and, on withdrawing the trocar, over three pints of pus flowed through the canula. The canula was tied and retained in the abscess for four days, after which the pus flowed through the fistula.

The pulse fell from 120 to 110 in one hour after the operation; pain soon ceased, and the patient steadily improved, without any bad symptoms, till 10th April, 1872. Although the abscess discharged freely, he was able to come to the office, a distance of four and a-half miles, for his medicines, which consisted of a tonic, and a dilute solution of carbolic acid—which was injected into the abscess three times a-day.

On the 8th June, 1872, while riding on horseback at a rapid pace, he was taken with an acute pain in the anterior abdominal region, and I was again sent for. In spite of our best efforts, a large abscess formed in the abdominal wall, and opened about half-an-inch below the umbilicus. But his sufferings did not cease, for in a few days another abscess formed between the latter and the pubes, which I opened with a bistoury. These two merged into one. After having suffered the most severe and almost incessant pain, he died on the 15th July, 1872.

During this last attack, although pus was still discharged from the abscess in the liver, there was no pain in that region, and the daily discharge grew somewhat less.

I might just say, that, immediately previous to his last attack, he had nearly recovered his natural strength, but his right shoulder was considerably lower than the left, on account, I suppose, of adhesions which had formed in the hepatic region. About two hours before his funeral took place I reached his residence and obtained a *post mortem* examination, but had not time to send for any of my medical friends. I found a portion of the peritoneum, about 2 inches in diameter, underneath the lower abscess, eaten through, and also a portion, about an inch in diameter, underneath the upper one, and a large quantity of pus among the intestines. Nearly half the right lobe of the liver was implicated in the old abscess. There was no large sac, but several sinuses in different parts of the diseased por-

tion, all of which joined to form the fistulous opening in the side. The pleural cavity was obliterated and the pleura firmly adherent all round as high as the upper border of the 9th rib in the middle of the lateral thoracic region.

CASE II.—REMOVAL OF THE RIGHT ULNA AND A THIRD OF THE LEFT FIBULA IN THE SAME SUBJECT.—J. S., æt 14 years, an intelligent boy, of slightly scrofulous constitution, was attacked in the latter part of Dec., 1871, with erysipelas, which, I suppose, was phlegmonous, and treated by two or three Homœopaths till the 20th of May, 1872, when I was called to see him. His father said that he had wished to consult me before, but was deterred from doing so by the attending physicians, who told him that I would be so harsh and reckless that I would kill the patient, either with powerful medicines or by inconsiderately operating upon him. On examination I found him very much emaciated, pulse 130, the entire right ulna diseased and all apparently necrosed except the part immediately entering into the formation of the greater and lesser sigmoid cavities, and about half an inch of the styloid process, and no attempt at formation of bone. There were several cloacæ discharging pus; one at the summit of the olecranon, and another which discharged a very large quantity of purulent matter from the lower fourth of the ulna, which was entirely denuded. There were two sinuses over the left fibula, the upper third of which was in a state of complete necrosis. I put him upon mild alteratives, tonics, beef essence, &c.; changed the green salves which were being used, for antiseptic dressing on cotton batting, to be changed three times a day, and otherwise tried to improve his strength.

On the 3rd of June, his strength having considerably improved, I put him under chloroform, laid open the tissues along the external border of the ulna, as high as the subcutaneous portion, and removed the entire bone (excepting half an inch of the carpal extremity) as high as the base of the coronoid process, where it was nearly eaten across.

The insertion of the triceps and most of the insertion of brachialis anticus, and origin of the pronator radii teres were preserved intact; but some of the posterior portion of this remaining fragment of the ulna was lost. I then closed the soft tissues with sutures and narrow adhesive strips, dressed as before; and soon the purulent discharge grew less and healthy granulations set in.

On the 10th of June I removed the upper third (necrosed portion) of the fibula, which was already nearly detached from the living portion. Both seats of operation healed in time, and the cloacæ and sinuses closed. Both limbs, which were rigidly flexed, have with use and daily frictions, become very nearly straight. He has recovered nearly perfect flexion of the elbow, apparently perfect pronation and supination of the hand, and almost perfect strength of the arm; for his father tells me that he can conveniently carry two pailfuls of water at a time, one in each hand.

Correspondence.

(To the Editor of the LANCET.)

DEAR SIR,—In your last issue Dr. Tracy, in his controversy with Dr. Clapham, has intentionally, or otherwise, driven me into a position that calls from me a few remarks; not indeed that I am on the defensive, but that I fear the introduction I gave Dr. Clapham, and the motives of Dr. Tracy in reproducing it, in your journal, might be misconstrued. Dr. Tracy calls my introduction an *ethical* one—ironically of course—and quotes it to show that Dr. Clapham was not properly introduced to the public of this place, in contradiction to Dr. Clapham's assertion that he was. In that production there is not one word that should displease the most scrupulous observant of medical ethics. And how remarkable that it should have received the criticism of our very ethical and liberal friend Dr. Tracy, whose cards have been exhibited in the most public places as a practitioner, of rare qualities, on the private diseases of females. The doctor is not only a most *consistent man*, but an excellent tactician. He professes to be an Englishman of *Welsh* extraction I understand, and at the same time is a member of the Irish Protestant Society, Orange Association, Odd Fellows, Free Masons and, I believe, of St. George's Society, and I do not know how many Christian societies he may be associated with Truly, "he is a liberal man." If, however, Dr. Tracy thinks it not strictly ethical; what of it? It is only the opinion of one individual. There is no ethical law to guide us in these respects, and if there were a law that was hostile to truth and modesty, it would only demonstrate the imbecility of its originators, and would harmonize with many of

the incongruities that have been tolerated and perpetuated by many of the members of our profession. The introduction was simply what I had learned of the doctor from others, and what I knew of him myself, and I am pleased to know that the opinion I gave of him, in the first place, has been verified in many respects. He has received an important appointment from one of the first Universities in our country, and from men, certainly good judges, of an educated man in general literature. At all events Dr. Clapham knew nothing of this card until he saw it in the paper, and consequently no blame *could* be attached to him. In fact the card has had nothing whatever to do with Dr. Tracy's conduct towards Dr. Clapham. He has made use of it to conceal the real truth, which was simply unmitigated jealousy, a passion, I regret to say, which predominates to such an extent with some medical men that they make themselves most miserable, and inspire others with a just dread of their slanderous tongues. The time came when the thinking man had an opportunity of displaying his superiority over the mere routinist, or the passive observer, and which, you are aware, seldom occurs in medical practice, so *thoroughly* ignorant are the masses of anything that relates to *physic*, much less the merits or demerits of medical men. A few days after Dr. Clapham's arrival the accident on the Grand Trunk railway occurred near Belleville, a report of which will be found in another place. It was at this date, and simply because of a difference of opinion in reference to the treatment of these unfortunate sufferers, that the hostility towards my partner commenced.

Yours respectfully,

P. V. DORLAND.

Belleville, March 18th, 1873.

(To the Editor of the LANCET.)

DEAR SIR,—In an excellent synopsis of the "History of Medicine," written by Dr. Agnew, and published in the *Lancet*, there is an omission of the name of one of the most deserving of our masters in the dark ages, which it would be well to supplement. I refer to Andreas Vesalius, who published the *first reliable* work on Anatomy given to the world. Before his day, the dogmatism of Galen prevailed, and it was thought to be the vilest sacrilege to dissect the human body. All anatomical knowledge of the human body had

been obtained in a crude way, from comparative anatomy. Vesalius did not desecrate graveyards, but he haunted charnel houses, gibbets, and plague-stricken localities, fearless of death, and defiant of persecution. At the early age of 28 years, he published an *illustrated* work, (still extant) remarkable for its thoroughness and fidelity to truth. He dedicated it to Charles V, of Germany, and, like Copernicus, in a similar position, hoped, in this way, to avert the coming storm of popular indignation. He was appointed the Emperor's physician in spite of the sharp weapons theologic, hurled at him for, so-called, sacrilege and Atheism. The charge had centuries before formulated into a proverb, *Ubi sunt tres medici, ibi sunt duo athei*. Philip came to the throne, and then the blood-hounds of persecution were let loose, and he was hunted to death. He was sentenced, by an august court, to go, on a journey of penitential sorrow to the Holy Land, for his *sin* of *post mortem* examinations, and perished by the way, but "his works do follow him." In the picture gallery at Munich, *behind one of the doors, and in a dark corner*, is an admirable picture of him, executed by the great and noble painter Hannan. A raging crowd of infuriated fanatics is outside his dwelling, thirsting for his blood. His door and window are bolted and barred. Before him is a crucifix, to him, an emblem of faith and hope. His scalpel is searching, as if endowed with instinct, every nook, cranny, passage, and labyrinth of the human brain, perhaps, expecting to find the seat of the domain of animal life, or the dwelling-place of transcendent intellection and moral judgment. He was a martyr for the truth, and should be included among those worthies, who, like Galileo, Kepler, Ricetto, Vanini and Bruno, are

"Heirs of all the ages, in the foremost files of time."

D. CLARK.

Princeton, March 16th, 1873.

TO THE EDITOR OF THE CANADA LANCET.

DEAR SIR,—Being a reader of your journal, and observing a correspondence from Dr. Cornell, upon the subject of fusion, etc., published in the December issue; and also a review of the same, in the January number, over the signature of Vox (whose name does not appear in the *Ontario Medical Register*), and as he does not use any *prenomens*, I therefore concluded that he must have been *deified*.

Accordingly, the *Oracles of Delos* (?) were applied to. For some time the Court of Apollo was thrown into complete confusion to determine who Vox was, when, after due deliberation, it was made known to the Court that Vox was a son of Erudition! Whereupon Apollo called the Muses into the assembly, and directed them to notice Vox and the profession in Ontario, in the following satire :

FROM THE COURT OF APOLLO,—

TO VOX.

Hail, Vox ! illustrious son of Erudition,
Master of the Healing Art, achieved by long lucubration !
Not so with Chiron, the centaur, Æsculapius or his sons,—
Podalirius, the first of phlebotomists, or his brother Machaon,—
They were deities, gods or sons of gods, we're told,
Who, all forms of diseases cur'd, as if, by magic, bold !

As *leeches*, 'twas unnecessary they should be profound
In *Latin, Greek, Hebrew, Arabic*,—but renown'd.
Were they of celestial birth—with banners unfurl'd—
Citizens of earth, in erudition of another world ?
Thus *facile* to them was the healing art made known,
From god to god, or sons of gods, and the nymph CEnone.*

But poor Vox ! of pensive mien and brow of anxious thought,
Who, with keen and searching gaze, in his *dictionary*† sought,
By pond'ring o'er the letter'd page where vast experience lies,—
Spending half his hours of silent night with earnest, wakeful eyes,—
To make out the *pathy*, held by each school of the day,
And *select* which was *best* the course of death to stay.

Alas ! the school of Vox' first faith—*allos pathos*—is defin'd,
Which, in after years, prov'd obnoxious to his mind ;

* CEnone was a nymph, taught by Apollo the use of medicinal herbs and the general principles of the healing art, and resided at Mount Ida before the Trojan war and at its close. Upon the death of Paris, she died of grief. She dearly loved him, and he also reciprocated her love, having formed her acquaintance, while residing at Mount Ida, acting in the capacity of a shepherd, prior to his stealing Hellen, the cause of the Trojan war.

† Vox, in his review, only speaks of having a dictionary, which is presumed to constitute his library. The words in italics refer to expressions used in the review.

To his *dictionary* he repair'd, with an air of great disdain,
To see if he, by it, some vantage ground might gain ;
When, lo !—a word—by Greek is spoken,—
Omoioopathia !—I'm, dear friends, not joking.

“ This,” says Vox, “ is what I never yet could *glean*,
Tho' hinted at by Gregory, the learn'd, of Aberdeen ;
But now I perceive, with wonder and surprise,
How Gregory propounded to Hahnemann, the wise,
The true principles in therapeutics on which to venture,—
Consisting exclusively in *similia similibus curantur*.”

“ But still,” says Vox, “ with all this I'm not content ;
There's another school which I must circumvent,—
In Ontario,—it is last, not least, known to us,
In nomenclature, claims Greek origin—*EKLEKTIKOS* !”
Not an origin of man's design, brought forth by pensive thought,
Or gov'n'd by rules of deduction, from past experience fraught.

Nor did fresh necessity or great calamities give it birth ;
Its name is connected with the deities, how valuable is its worth !
Taught by Apollo, were the *deified*, in therapeutics, skill'd
In cordials pure and sanative, from Nature's lap distill'd.
’Tis from Homer, the history of the past we learn,
How they invoked the deities the course of death to turn.

Thus, from pestilence and plagues, were whole armies sav'd ;
Men, with broken bones and wounds contus'd, to health were made.
Was he an *Eclectic* ?* for whom the stern Achilles exclaimed,—
“ Nestor ! to the camp with ardent zeal, this *leech* restore again,
Who, at the siege of Troy, was wounded by Paris lance ;
And to armies, of more value was than many heroes' chance :”

For, skill'd was he in surgery and surgical appliances profound ;
Removing darts, staying blood, and soothing pain, renown'd.
Or was he *one* ?† from whom the dead new life receiv'd,—

* Machaon ; he and his brother, Podalirius, accompanied Agamemnon to the siege of Troy (B.C. 1192).

† Æsculapius, who, according to Ovid, restored Hippolitus to life, who was travelling in his chariot on the sea-coast ; his horses took fright from an awful sea monster, capsized his chariot, and dragged him across the rocks and tore him to pieces. Æsculapius being called to see him, restored this noble prince to life. In this act, Æsculapius encroached upon the rights of Jupiter, who caused the physician to be killed by lightning.

Causing the vengeance of Jupiter, who, being displeas'd,
To see a mortal on his right, supreme ! so rudely encroach,—
That he, with lightning, the *leech* kill'd, to save reproach.

“ After all,” says Vox, “ ’twill not do, with *cram* progression,
For the *Eclectics*, as a body, to merge in the *General profession* !”
The Medical world looks on, and says, “ ’Tis the height of folly
To withhold uniting as one ; *nothing vulpine*—be jolly !”
In Ontario, there’s no cause to keep the sects apart :
Merge in one, with one accord, and with one heart !

To all this, “ Vox ” cannot quite agree,—
Tho’ each sect he’s tried, in numbers three,—
And exclaims, with ardor, the *gist* of his wit :
“ *Nemo mortalium omnibus horis sapit* !”
This rash expression, Apollo says, lacks intuition ;
And fusion ! Vox should espouse, as an act of contrition.

Here ends all, the Muses were, by the Court of Apollo, instructed to
say ;

Hoping Vox will memor’alize his confrères, and that without delay—
To act in unity for the profession’s interest, as a whole,—each taking
a part ;

Assuaging past grievances, with future prospects, that the healing art
May achieve a status renown’d in learning and fame ! and condescend
To drop the name of each *pathy*, which, in fusion, may wisely end.

CALLIOPE ET CALIO.

Temple of Muses, March 1, 1873.

CORONERS—Francis Lucas Nesbit, of the village of Angus, Esquire, M.D., to be an Associate Coroner within and for the County of Simcoe. William Graham Bryson, of the village of Fencelon Falls, Esquire, M.D., to be an Associate Coroner within and for the County of Victoria.

COLLEGE OF PHYSICIANS AND SURGEONS KINGSTON.—The following gentlemen passed their final examination on the 21st ult.—J. B. Kennedy, C. H. Lavelle, A. S. McLennan, J. A. Close, A. David, A. N. Purdy, W. W. Walker, S. T. Macadam, J. McMahon and H. Spears.

Selected Articles.

ACTION OF MERCURY ON THE LIVER.

The valuable report of the Edinburgh Committee of the British Medical Association on the Action of Mercury on the Liver added very largely to our knowledge of the subject, without altogether settling a great many important questions concerning the therapeutics of the drug.

Few physicians who have had any practical experience of the use of mercurial purgatives in cases of so-called "biliousness," will deny that their immediate effect is decidedly beneficial, although many may be deterred from employing them by the belief that, once begun, they must be continued, and will ultimately prove highly injurious to the patient. The relief occasioned by a blue pill and a saline purgative is a matter of every-day observation; but the *modus operandi* of the mercury is a question on which much difference of opinion prevails, and any attempt to answer it must depend, to a considerable extent, on the view taken of the pathology of "biliousness." Do the dull, heavy, and languid feelings, the disinclination to exertion, mental or bodily, the irritable or peevish temper, the failing appetite, the muddy complexion, and dingy conjunctiva, which most persons know, alas! too well, owe their origin to catarrhal changes in the gastric and intestinal mucous membranes alone? or is popular pathology partly right in ascribing them to "bile in the blood" or a "sluggish liver?" For our part, we are inclined to hold the latter opinion, and to believe that not without reason are the disappearance from the eyes of the yellowish tinge which seems as if it only required to be somewhat deepened to become jaundice, and the coincident appearance of bile in the stools after a mercurial purgative, pointed to as proofs that too much bile in the blood is (partly at least) the cause of biliousness, since with its removal from the system the symptoms disappear. So long as it was supposed that bile was formed in the blood, and only separated from it by the liver, such a view as this might meet with ready acceptance; but how are we to reconcile it with the doctrine of most physiologists, that bile is not separated from the blood by the liver, but is formed within that organ itself? Fortunately, this is not diffi-

cult, for Schiff has shown that we have been latterly accustomed to take too narrow a view of the functions of the liver, and that it separates bile from the blood, or, as we may term it, excretes, as well as forms or secretes it. This he did by tying the ductus choledochus in dogs, and putting a canula into the gall-bladder, so that he could collect the whole of the bile secreted by the liver. Immediately after the operation, the flow of bile was abundant, but in the course of half-an-hour it became greatly diminished, and remained so, never again reaching the amount at first observed. This curious result Schiff found to be due to the bile being all removed from the body by the canula, instead of passing, as it normally does, into the duodenum, whence it is reabsorbed into the blood, and again excreted by the liver. In the first half hour after the fistula was made, the liver was excreting as well as forming bile, and so more flowed from it than in any subsequent period when it was only forming it.

Whenever Schiff introduced bile into the blood, either by injecting it directly into the veins, or putting it into the duodenum, stomach, or areolar tissue, the flow of blood from the liver was at once increased, but again diminished when the additional bile had been excreted. By another series of experiments, he also found that not only can a certain quantity of bile be present in the blood without producing jaundice, but that it probably is always present. We thus see that, normally, a great part of the bile goes round in a circle, from the liver into the duodenum, thence into the blood, so to the liver again, while another part is carried down by the contents of the intestine, and, after becoming more or less altered, passes out of the body with the fæces.

Let us now consider what the result will be if the quantity of bile circulating in this way should be increased. All observers are agreed that abundant food increases the secretion of bile; and we will suppose that this has been done by continued good living and a succession of heavy dinners, such as most Englishmen are accustomed to indulge in at Christmas time. The stomach and intestines, in all probability, also become disordered, and it would be hard to say what part of the condition in which the patient then finds himself is to be assigned to them and what to the bile; but this we can readily see, that all the symptoms that an excess of bile in the blood can produce, short of jaundice, will be occasioned; nor can these

be removed by any purgative medicine, which, like aloes, will merely act on the large intestine. The colon may be cleared of its contents, but the bile will go on undisturbed in its accustomed round. Very different, however, will be the result if a purgative be administered which will act on the duodenum, as we will assume mercury to do, more especially if it be combined with such an one as sulphate of magnesia, which will act on the rest of the bowels. The mercury stimulates the duodennm to peristaltic contraction, the bile is hurried rapidly downwards, the remainder of the intestine is likewise contracting vigorously, and in a short time all chance of re-absorption is gone, for the bile has been finally evacuated. All excess of bile has thus been got rid of, and, as far as it is concerned, the liver, duodenum, and other organs may now go on performing their functions in the normal way, until some fresh indiscretion on the part of the patient again causes a disturbance.

In the account we have just given of the action of a mercurial purgative, we have assumed that it acts on the duodenum. Now, this we cannot at present directly prove; but we have the indirect proof afforded by the fact, observed by Radziejewski, that leucine and tyrosine, which are products of pancreatic digestion, appear in the fæces after the administration of mercurials, as well as that yielded by the large evacuations of bile which calomel produces, and which, as Buchheim has shown, really give their characteristic green colour to the so-called "calomel stools." By thus causing elimination of bile, and lessening the amount circulating in the blood, calomel acts as a true cholagogue, in the sense in which the word was employed by those physicians who looked upon the liver merely as an excreting organ, although, as modern experimenters have proved, it may lessen the amount actually secreted; and this it may do in a double fashion, for not only does it diminish the quantity which has to be excreted by the liver in the manner already explained, but, as the Edinburgh Committee of the British Medical Association have shown, it likewise lessens the formation of bile. In their experiments, the diminished secretion which followed mercurial purgation could not be due to the prevention of re-absorption, for the whole of the bile was regularly removed from the body as quickly as it was secreted, and we are, therefore, obliged to attribute it to diminished formation. What the cause of this may be, we are not at present in a position confidently to state; but we know that

fasting lessens the formation of bile, and if the food be hurried out of the intestine by a purgative before it has time to be absorbed, it might just as well not have been eaten at all.

We have now seen how an excess of bile may be present in the blood without the liver being either "sluggish" or torpid; and it seems to us that the difference of opinion which has hitherto prevailed regarding the action of mercurials is in great measure due to attention having been directed to the amount of bile poured out from the liver, instead of to what is of much more importance in reference to "biliousness"—viz., the quantity which remains in the blood after a dose of blue pill or calomel.—*The Lancet*, Jan. 4, 1873.

THE RELATIVE FREQUENCY OF DISEASE BETWEEN THE RIGHT AND LEFT SIDE OF THE HEART.

BY CORNELIUS BLACK, M.D., LONDON, M.R.C.P., COR. FELLOW IMPERIAL
SOC. OF PHYS., VIENNA, ETC., ETC.

If the question were asked, "Which side of the heart is the more frequently affected by disease?" the answer perhaps in nine cases out of ten would be that the left side of the heart is the one which more frequently suffers. This answer would not, however, embrace the whole truth. It would be true of the aggregate of cases of cardiac disease without reference to age; but it would be untrue if the occurrence of cardiac disease were referred to the later periods of life. If a man lives to the age of about forty years without having suffered from cardiac disease, and if after that period the heart becomes affected, the mischief will, as a rule, be found to exist in the right side. If, on the contrary, cardiac disease should occur before that age, the disease will almost invariably be found to exist on the *left* side. Hence it follows that the right side of the heart is the seat of cardiac disease occurring before middle age.

As in time, so it is with respect to the nature of the diseases which affect the right and left sides of the heart respectively. Those of the right side are the result of tissue degeneration, or of mere mechanical influences; those of the left side are almost invariably the product of inflammation. The former are diseases which tend to

widen the valvular apertures and to dilate the right side of the heart; the latter are diseases which tend to contract the valvular apertures and to increase the size and bulk of the left side of the heart.

Disease of the right side of the heart is essentially passive and secondary in its character; disease of the left side of the heart is essentially active and primary in its character. I speak now of disease when it occurs, not when it has existed for some time. Active inflammation of the left chambers of the heart arises; it progresses to a certain extent; treatment subdues it; the patient recovers; but a certain amount of damage is left behind. Years pass on: the patient during this time appears none the worse for his previous illness; but at length pulmonary symptoms suddenly manifest themselves, and then it is that the physician discovers that the left side of the heart is permanently damaged, and that the present condition of the lungs is traceable to this cause.

In this instance the mischief in the heart inducing this condition of the lungs is not, strictly speaking, active. The first step of the cardiac disease was active; but the second step was chronic. Bit by bit—increment by increment—after the patient's apparent recovery from the primary attack, is the valvular lesion left by such attack added to, not perhaps constantly, but intermittingly, until at length the aggregate increments of addition so hamper, oppress, obstruct, and distort the mitral or the mitral and aortic valves, that secondary consequences begin to follow.

In such a case the cardiac disease producing the first degree of valvular lesion was *active* or *acute*; whilst that which really induced the secondary consequences—congestion of the lungs, hæmoptysis, hypertrophy of the lower lobes, or hypertrophy of the left ventricle—was essentially chronic.

Acute rheumatism—a fruitful cause of cardiac disease in the earlier periods of life—is seldom seen beyond the age of fifty. I have, however, attended a case of acute articular rheumatism at the age of seventy-five; but such an instance was an exception to the rule. After fifty, acute rheumatism gives place to a form of rheumatism which slowly produces rigidity of the coats of the bloodvessels, hardens and contracts the tendons, thickens and renders stiff and rigid the ligaments of the joints, hardens and lessens the articular cartilages.

Thus, then, according to a law of nature the *ultima linea* of life ends in—degeneration.

I hold that the breathing of impure air is a fruitful source of disease of the right heart occurring after middle age. How many people ignorantly favour its occurrence by confining themselves to closely-shut, non-ventilated, stifling rooms in which the carbonic acid has accumulated to two or three per cent. of the air they respire! How many are thus destroyed by being compelled, through the exigencies of life, to pass the greater part of their time in pits and manufactories where ventilation is defective, or in which the air respired is poisoned by noxious fumes and offensive emanations from the materials undergoing the process of manufacture! How many are falling victims to poisonous influence upon the heart of the atmosphere of an underground railway! What do these facts suggest? How are these evil results to be prevented? The simple answer is—Let the rooms in which you live be effectually ventilated by an incoming current of air filtered from all adventitious impurities, and so divided that no draught shall be felt; and by an outgoing current which shall remove from the apartments the carbonic acid, carbonic oxide, sulphurous-acid gas, sulphuretted hydrogen, and other noxious compounds, as rapidly as they are generated. Apply the same principle to public buildings, theatres, schools, manufactories, pits, and to all places in which people are accustomed to congregate.

When the degeneration of the right heart has progressed to a certain extent, incompetency of the tricuspid valve follows either with or without the aid of an exciting cause. Hence it is easy to understand why dilatation of the right heart and tricuspid incompetency are often found to exist apart from any previous history of cardiac disease.

The third great vital function which influences the degenerative tendency of the heart is that of the circulation of the blood. To preserve the health of the tissues, the blood must not only be pure and rich in the materials of growth, but it must flow with a certain speed through all the blood-vessels. If the speed with which the blood moves is on the side of either *plus* or *minus* of the standard of health, disease will shortly arise. If it is on the side of *plus*, active disease of the heart, where that organ is the one to suffer, will follow. If on the side of *minus*, tissue degeneration ensues. Active disease will be the consequences before middle age; degeneration after that period.

These facts teach that all violent and long-continued efforts of

the body should be avoided. They hurry the heart's action to an inordinate degree, they cause it to throw the blood with great force into the extreme vessels, and, as there is almost always one organ of the body weaker than the others, the vessels of this organ become distended, and, remaining distended, the organ itself becomes diseased. Running, rowing, lifting, jumping, wrestling, severe horse-exercise, cricket, football, are fruitful causes of heart disease. Those which require the breath to be suspended during their accomplishment are more fruitful causes in this respect than those which require no such suspension of the breathing. Rowing, lifting heavy weights, wrestling, and jumping do this ; and of these, rowing is the most powerful for evil. At every effort made with the hands and feet, the muscles are strained to their utmost ; the chest is violently fixed ; no air is admitted into the lungs ; blood is thrown by the goaded heart with great force into the pulmonary vessels ; they become distended ; they at length cannot find space for more blood ; the onward current is now driven back upon the right heart ; its cavities and the blood-vessels of its walls become in like manner distended ; the foundation of disease is laid. Hypertrophy, hæmoptysis, inflammatory affections of the heart and lungs, are the consequences in the young ; valvular incompetency, rupture of the valves or of the muscular fibres of the heart, pulmonary apoplexy, and cerebral hemorrhage, are too frequently the immediate consequences in those of more mature years.

If the flow of blood is *minus* the standard of health, the heart's walls are imperfectly nourished by reason of a deficient supply of food within a given time ; the blood itself, receiving less aeration, is in consequence more impure ; degeneration of the heart's walls is thus induced, if it does not already exist—hastened, if it is present.—*Lancet*, August 24th, 1872.

TREATMENT OF HÆMORRHOIDS AND PROLAPSUS OF THE RECTUM BY THE CLAMP AND CAUTERY, WITH THE RESULTS FURNISHED BY 300 CASES AND UPWARDS.

PAPER BY MR. HENRY SMITH—LONDON MED. SOCIETY.

He commenced by referring to the first recorded cases of the

treatment in question which were given to the Profession in the Lettsomian Lectures delivered before the Fellows in 1855. At that time the cases he had operated upon were only thirty-eight, but the results of these induced him to continue the treatment, as his experience increased, he gradually began to discard the use of ligature, and he finally gave it up altogether, partly in consequence of some disastrous results in his hands, and partly from the excellent experience of the clamp and cautery. He now had operated on upwards of 300 cases, and many of them of the most severe and formidable character both locally and generally, and he would lay fairly before the Society the results of his extensive experience. He would first refer to some of the objections which had been made against the treatment in question, some of which were quite frivolous, such an one for instance as had been urged against it by a well-known writer on diseases of the rectum, who affirmed that the operation was bad because more than an hour was consumed in performing it, the truth being that five, ten, or fifteen minutes were ample, as far as the actual operation was concerned according to the nature and magnitude of the disease. As regards the mortality which had occurred in his hands, he had already laid before the Profession two instances where death had taken place after the operation, and since that period a third fatal case has occurred in the instance of a gentleman in broken-down health, on whom he had performed a somewhat severe operation, severe vomiting set in and continued for thirty-six hours, and then intense jaundice followed, the patient dying on the fifth day. There was no *post mortem* examination; and thus it was impossible to say whether death was caused by the chloroform or from some latent liver disease which had been aroused into activity by the operation. Only in two instances had anything like severe constitutional disturbance arisen after the operation; with reference to hæmorrhage which was pronounced by some as a grave objection to the operation, he had not met with one single case where he had to plug the rectum, and only one instance where it was necessary to inject iced water. This immunity from bleeding he considered to be due to the great care with which he applied the cautery, using it very freely and with instruments of various shapes and sizes. He had never seen ulceration occur and persist for a length of time after the operation in any single case in his practice. The period of convalescence was short in the majority of his cases, the patients

were walking about in a week. He had never known erysipelas or secondary abscess to occur after operation, a condition which occasionally gave great trouble after the use of the ligature, and the pain which ensued was generally at an end after two or three hours. The author then made some special observations regarding the mechanism of the instruments he used. Above all things it was necessary that the blades of the clamp should have a perfect parallelism when they closed, and it was very important after the cautery had been applied, to unscrew the blades very gradually in case any vein should have escaped the influence of the cautery. There existed considerable difference of opinion as to the value of the non-conducting plates of ivory attached to the clamp, but he never thought of operating without them, and if the patient did not take chloroform they were absolutely necessary as they entirely prevented the pain of the cautery. In corroboration of his remarks as to the absence of bleeding and other points to which he had referred, Mr. Smith read letters from several of the old house surgeons of King's College Hospital, all of whom spoke as to the absence of bleeding in the cases they had attended.

In the discussion which followed,

Mr. Bond said, that when at King's he had seen both cautery and ligature used, and had left without any decided opinion on the subject. Subsequently, a case of severe kind came under his notice, which had been treated by the cautery with great success. He had since then used the cautery in fifty cases very successfully and without hæmorrhage. He only used cautery in severe cases, preferring ligature in simple cases. He never used the clamp without giving chloroform, and thought the ivory appendages were of no use. He preferred the clamp for prolapsus ani, and for some operations about the nymphæ.

Dr. Vine defended the ivory bars which he had invented. Ivory was a non-conductor, and prevented burning of adjacent tissues by conduction or from slipping of the cautery.

Mr. Allingham congratulated Mr. Smith on his success. He thought the clamp and cautery a good method of operation but that the ligature used as it ought to be was a better. In 3,000 cases operated on at St. Mark's Hospital by ligature not one case of pyæmia occurred, and tetanus in one case only. He had not had a single death in 500 cases operated on by ligature by himself. As

regarded hæmorrhage perhaps he had not at first applied the cautery so freely as Mr. Smith had, but of late he had used the iron freely, and had had no hæmorrhage. If patients were sent out too soon after the use of the clamp and cautery, severe ulceration ensued inevitably. The susceptibilities of patients to pain differed greatly, but he thought there was no more pain after ligature than after the clamp. He thought the ivory wings of the clamp too broad and prevented the removal of sufficient tissue. Free removal was absolutely necessary, and the pile should be removed down to the cellular tissue if a radical result was aimed at.

Mr. Alfred Cooper had had a great number of cases of hæmorrhoids under his care, and had used the ligature and clamp about equally. He had never any reason to be dissatisfied with the ligature, but with the clamp he got severe secondary ulceration, and much greater pain was caused by the clamp than by the ligature. He had never seen hæmorrhage after the ligature; he could not understand how a patient could be cured effectually after three or four days. The plan of ligature introduced by Mr. Salmon, at St. Mark's, answered admirably.

Mr. Dunn corroborated Mr. Smith's statement as to the case they had seen together. The patient had been under the care of several eminent surgeons who declined to operate. He thought however the plan of ligature at St. Mark's was excellent.

Mr. Davy drew attention to Ambrose Pare's directions for avoiding the burning of skin. He thought the ivory was useful, the instrument often slipped when grasping the pile.

Mr. Wm. Adams asked whether with reference to the ulceration might it not be caused by using too hot an iron or by constitutional causes? The *écraseur* had given him satisfactory results in cases of disease of the rectum.

Mr. Wiblin (Southampton), as a provincial Fellow had listened to the paper and the subsequent discussion with much pleasure. In his earlier years he had used the ligature, but of late he had used the clamp which he much preferred, as causing less pain, and out of thirty-eight carefully recorded cases he got excellent results and had never had any hæmorrhage. He had not himself observed ulceration, and had been surprised at the rapidity of recovery.

The President for many years dealt with piles by means of ligature as taught at Guy's, but had not been quite satisfied. For the

last eight or ten years he had used the clamp and cautery and had been well pleased with the results. He thought the iron should be freely used and that the ivory might facilitate this. The clamp was only a means to an end, and the treatment should be spoken of as by cautery than as by clamp. He always clamped each of the diseased portions before using the iron. The galvanic cautery answered admirably.

In replying Mr. Henry Smith thanked the Fellows for the kind manner in which they had received and discussed his paper. He agreed with the President that the cautery was the principal part of the operation, it should be applied at a black heat. If there had been so much ulceration as had been spoken of, surely he would have heard of it. Mr. Allingham's remarks were valuable; as regarded pain, except in a very few cases he had not met with it, and this he attributed to the ivory plates for which he had to thank Dr. Vine.—*Med. Press and Circular.*

SUCCESSFUL CASE OF GASTROTOMY IN EXTRA-UTERINE GESTATION.

BY LAWSON TAIT, F.R.C.S.—ROYAL MED. AND CHIRURGICAL SOCIETY.

In the case of J. N——, æt. 27, extra-uterine pregnancy was diagnosed on September 23rd, the child having arrived at the term and died about the end of the July previous. The operation was performed on November 2nd, the section being much as in ovariotomy. After opening the sac the feet presented, and no difficulty was experienced in removing the child, except in extracting the head from the pelvis, in which it was deeply packed, and where it had contracted adhesions to the floor of its cavity. The edge of the wound in the sac was stitched to the edge of the peritoneal wound by a continuous suture, the peritoneal cavity being thus completely closed. The upper half of the parietal wound (its entire length being about seven inches) was closed by deep sutures. A syphon drainage-tube was inserted deeply into the pelvic cavity, and the whole was syringed out every eight hours with a solution of soda. A foetid discharge issued from the cavity till about the eighth day after the operation, when it became purulent, and was mixed occasionally with placental *débris*. Pieces of detached placenta were

removed occasionally, together with foetal hair which had become adherent to the internal surface of the cyst, and been detached from the scalp in removing the child, until November 29th, when the great mass of the placenta was removed. After this the cavity rapidly closed, the part in the pelvis being quite obliterated early in December, and the whole shut up by the end of the month, leaving only a small sinus. The patient had a severe struggle with hectic.

The chief peculiarities of the case are—the absence of any “false labour” previous to the death of the child; the leaving the placenta undisturbed; and the peculiar method of closing the peritoneal cavity, and leaving the parietal wound partly open. To leave a communication between the cyst and the peritoneum is to run the gauntlet of pyæmia and peritonitis. Closing the parietal wound entirely must lead to similar results.

The operation, performed as in this case, would seem to have no greater risks than ovariectomy, and it is certainly preferable to leaving the cases to take their chance of discharging the misplaced fœtus by suppuration. If possible, the operation ought to be done near the term, and before the death of the child. If the latter condition cannot be obtained, the operation ought to be undertaken as soon after the death of the child as possible, to avoid the serious complications of adhesion between the fœtus and the cyst.

Mr. Spencer Wells thought the paper was of importance as showing that the placenta might be left and allowed to be discharged through the abdominal opening. This removed one of the great difficulties and dangers of the operation. From the account given, he thought that in this case the incision might have been made through the posterior wall of the vagina; it would have allowed more perfect drainage, and have imitated the natural process when the fœtus was spontaneously discharged, which was usually through the vagina or rectum.

Dr. Heywood Smith said there had recently been three such cases at the Hospital for Women, but all had proved fatal. In one case gastrotomy was performed and the placenta removed; the patient died from hæmorrhage and shock. In another the placenta was left to be discharged through the abdominal opening—the patient died of peritonitis, which came on before the operation. He thought it was best to operate early during the life of the child.—*Med. Press and Circular.*

ON THE FALL OF TEMPERATURE ACCOMPANYING GREAT WOUNDS BY FIRE-ARMS.

By Paul Redard: abridged from a Translation by Arthur E. F. Barker, L.R.C.S.I., "Dublin Four. of Med. Science," Sept., 1872.

Placed during the latter part of the French war,—the struggle between the regular army and the Federals,—in the ambulances "*de la Presse*," (in the service of his master, M. Demarquay), M. Redard had ample opportunities of noticing the effect of injuries by fire-arms in lowering the temperature. Every time a patient suffering from a grave wound from a fire-arm was observed by him, a lowering of the temperature of the body was found. In most of the cases the injuries had been inflicted by the bursting of shells, but in some they had been caused by cannon-balls shattering limbs, and in the instances of the Federals the wounds had usually been received while they were in a state of intoxication. In such M. Redard found a wound produced a much greater fall of temperature than did one of equal extent in men of temperate habits, and in them amputations were most unsuccessful. He, therefore, quite endorses the dictum of M. Verneuil, that the prognosis of traumatic lesions, all other things being equal, presents an exceptional gravity among subjects addicted to drinking chronically. The author narrates his observations in fifty cases, and concludes his memoir with the following deductions :

"1. In great injuries by fire-arms, fall of temperature is a constantly observed fact.

"2. Several elements come into play in producing this fall. Among the principal we will mention,—nervous shock, the excitement of the combat, with consecutive stupor, hemorrhage, and, lastly, alcoholism.

"3. Every wounded man brought into an ambulance with a grave wound which seems to necessitate an operation, and who shows a temperature below 35 5' (95.9° Fahr.) will die, and ought not, consequently, to be operated on.

"4. Every wounded man in whom a salutary reaction is not produced within four hours, and in whom the reaction is not a direct sequence of the fall of temperature, must be considered as gravely injured.

"5. Burns give rise to an exceptionally great fall of temperature.

"6. The same is the case in wounds of the abdomen. The fall is the more marked the nearer the wound approaches the stomach.

"7. The diagnosis of penetrating wounds may become less difficult, on account of the characteristic thermometric phenomena to which they give rise.

"8. The state of intoxication in which the wounded are sometimes found favors singularly the observed fall of temperature.

"9. Wounds by shells, other things being equal, produce a fall of temperature more accentuated than those by balls."—*Med. Times*.

PROPYLAMINE IN RHEUMATISM.

The alkaloid propylamine, which is now obtaining some celebrity in this country as a cure for rheumatism, is a body with which chemists have been some time familiar.

Propylamine is identical with the body secalin, the volatile alkaloid discovered by Winckler, in ergot of rye. The same alkaloid has also been obtained as an artificial product from narcotina, codeia, cod liver oil, and other substances, and it has also been found in certain species of chenopodium. The most productive source of propylamine appears to be herring brine or pickle, and it is separated from the brine by distillation with potash. The product contains much ammonia, and when neutralized with hydrochloric acid, the mixed chlorides of ammonium and propylamine are obtained; this last can be separated from the first by means of absolute alcohol, in which it is soluble.

The chemical formula of propylamine is C_3H_7HN (Attfield), and it appears as a colourless volatile body possessing an intensely strong odour of herrings. It mixes readily with water, and with hydrochloric acid forms white fumes of chloride.

Dr. Awenarius, of St. Petersburg, first called attention to the use of propylamine in rheumatism, and between March, 1854, and June, 1856, this physician treated 250 cases of rheumatism with great success. Some of the cases were acute, some chronic, and many complicated.

A solution of twenty-four drops of propylamine in six ounces of

mint water, with syrup added, may be given in doses of half a fluid ounce every two hours, with every prospect of benefit to the patient.

Messrs. Rew & Co., of 282 Regent Street, to whom we are indebted for a very characteristic specimen of propylamine, inform us that 30 to 60 drops of carbolized ether added to each dose of propylamine, very completely destroys the very unpleasant fishy smell and taste, so very objectionable in the pure uncombined alkalioid.—*The Doctor.*

VACCINATION.

The following propositions are “offered as matters of belief, and some of them as matters of record,” by a writer in the *Medical and Surgical Reporter*:—

1st. Without vaccination, 1 death in 10 would be the result of small-pox.

2nd. Without vaccination, 19 out of 20 would have small-pox.

3rd. Without vaccination, 67 per cent. of the cases of small-pox would be fatal.

4th. With vaccination, not 2 per cent. of the inhabitants will take small-pox.

5th. With vaccination the percentage of deaths from small-pox is only about 8 of the 2 per cent. who will take it.

6th. A larger percentage of those who have had small-pox will have the secondary disease than of those who have been vaccinated. That is to say, vaccinia is a better prevention of varioloid than small-pox is.

7th. Humanized virus is more likely to take than the original virus from the cow.

8th. Humanized virus, whether it takes or not, does not produce such severe constitutional symptoms as primary cow virus does.

9th. It is not proved that either humanized virus or primary cow virus is the better in its protective effects.

10th. There are certain individuals who do not seem susceptible of variola.

11th. There are certain individuals who do not seem susceptible of vaccination.

12th. The taking of small-pox after vaccination is no proof that a secondary vaccination would have succeeded.

13th. A successful re-vaccination is no proof that the individual re-vaccinated would have taken small-pox.

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TORONTO, APRIL 1, 1873.

THE MEDICAL BILL LATELY BEFORE THE LEGISLATURE.

It is scarcely necessary for us to state that the Bill to amend the Ontario Medical Act was thrown out by the Committee of the House, owing to a want of unity among the members of the profession who appeared before it, and the expression of individual members throughout the country against the taxation clause. This is much to be regretted for various reasons. In the first place, in consequence of the small number of candidates likely to present themselves at the approaching examinations, there will not be sufficient funds to pay the travelling and other expenses of the examiners; and in view of this fact, the following humiliating resolution was passed by the Executive Committee at a late meeting, and ordered to be appended to the notice sent to each of the examiners:

"That in view of the small number of candidates about to present themselves at the approaching examinations, there may not be sufficient fees received to pay the amount heretofore allowed by the Council as remuneration to the examiners; be it resolved that the Registrar be directed to intimate this fact to each of the examiners appointed at the last Session of the Council, and request them to state whether they are willing to undertake their duties as examiners on the above uncertain condition as to their remuneration."—

Carried.

The result is that some of the examiners have refused to act. We have also been credibly informed that the Government was prepared to grant a sum, equal to the amount to be raised by the annual assessment on the profession, for the purpose of assisting in the erection of a Hall for the use of the College.

In the discussion which took place in the newspapers and elsewhere, while the proposed Amendments to the Medical Act were before the House, the Medical Council came in for a large share of blame, and far too little was said on the other side of the question. The friends of the Bill were too confident, and some of them too apathetic, and gave in this way the advantage to the noisy few who clamored against what they very imperfectly understood.

The Medical Council may very likely require the practice of a somewhat more rigid economy of its funds in the future; but no new corporation could be created, and enter upon its duties more successfully, or, on the whole, with fewer grave blunders to answer for; and the experience of the past will be of great value in time to come. The great good the Council has done in securing an all but uniform standard of matriculation and professional examination, far outweighs any comparatively trivial and easily corrected mistakes which have been made. Under such circumstances, for any one to propose the doing away with the Council, and a return to the old licensing system, would be preposterous—and most injurious alike to the public and to the profession.

At present, every one, no matter from what quarter he comes, who desires to practise, must present himself for examination before the Central Board of the Medical Council. The examiners are so chosen, that no school *can* have a preponderance of influence upon the Board; and candidates are further secured against any possible adverse bias on the part of an individual examiner, by the wise rule, under which the number, instead of the name of the candidate, is put upon each paper; so that, as no examiner knows the writer of the paper he is scrutinizing, his judgment must necessarily be unprejudiced. ALL CANDIDATES submit to the same examination, upon what may be called the foundational subjects of medicine; while those holding any special tenets, have the privilege, if they wish it, of choosing an examination upon these specialties, before examiners appointed for the purpose. And in this connection, it surely speaks volumes for the fulness and perfect fairness of the present Central

Board system of examination, that during the whole *four* years of its existence, no candidate (whatever he may have intended to practise afterwards) has chosen any other than the General Examination. And this will appear the more gratifying and creditable, when it is known that this has, in *every case been purely voluntary*; no pressure or influence of any kind having been brought to bear upon a single candidate. Indeed, the advocates of what some call the special systems of medicine, openly declare that they desire the full examination to be undergone by every one; so that hereafter, in Ontario, a knowledge of any specialty will be regarded as *an addition to*, rather than *a substitute for*, other general professional knowledge. Prior to this Central Board being founded, each school of medicine throughout Canada, and each Government Medical Board—of which Ontario had three—was an independent, and, to no trifling extent, a rival licensing body. Can this be returned to? Could it for one moment be tolerated? The only answer is—NEVER! Yet, were the Council destroyed, the Central Board would die with it, and the old and most wretched state of things, just spoken of, would speedily be resuscitated.

The Council, then, must be sustained. And it cannot be thought right that the chief burden of its support should fall upon the students who go up for examination. Warned by past blunders, a wise economy will certainly be practised by the Council in future.; but the students' fees must be lowered to a reasonable amount, and the diminution of revenue from this source will have to be made up in some way. The assessment clause of the late Bill, which was strangely struck out by a majority of one in the Parliamentary Committee to which it was referred, was intended in part to meet this. The maximum amount was fixed at the trifling sum of \$2 per annum, fully one-half of which was to be returned in the shape of a copy of the annual *Register* and the proceedings of the Council. A large proportion of the trifling balance was to be set aside for the building of an Examination Hall, and the establishment of a Museum and Library, to belong to the medical profession of Ontario,—just as Osgoode Hall belongs to the lawyers. In view of the fact that the druggists pay an annual fee of \$4, and the lawyers \$20, the trifling sought to be imposed as a tax upon our profession appears very small. We hope that next session the clause will be introduced into the Bill then to be brought in, for no one who knows the

medical profession well, can doubt its perfect willingness to contribute reasonably to the promotion of professional interests.

There was nothing narrow in the proposed legislation. Its great features being to sustain the Council in its work of making every practitioner of medicine, no matter what he may style himself, pass a professional examination of a creditable kind ; to enable this to be done at the lowest possible cost to students, by securing aid from the profession and from the Government, and to give—as far as law can give—adequate protection to all who, being registered practitioners, were entitled to it.

Believing, as we do, that the Council has been a great benefit to the profession already, and that it may be even much more so in the future ; believing that the Central Board, the existence of which in its present satisfactory manner of working, depends upon that of the Council, is a great benefit to the profession and to all our schools—by stirring us all up, so to teach our pupils, that on trial before that body, they may do credit to the colleges from which they come, we sincerely hope that most of the recently suggested improvements in the Medical Act may very soon become law.

DISPOSAL OF SEWAGE.

The manner of disposing of the sewage of large cities is a subject which has engaged the attention of some of the most eminent scientific men in Great Britain. Several very interesting and important articles have appeared of late in the medical and secular press of England regarding this matter, and various plans have been suggested to accomplish this object. The great aim is so to dispose of the sewage as to render it innocuous, and at the same time to subserve some useful purpose in an agricultural point of view, and so to carry on this operation as to make it pay the cost of working. It is no doubt an exceedingly difficult problem. There are three plans by which it is proposed to dispose of and utilize the sewage which now flows into the bays and rivers from large cities, viz., *irrigation*, *filtration* and *precipitation*, or the A B C process, as it is called, because Alum, Blood, Clay and Charcoal are the substances used. The process by irrigation consists in allowing the sewage to flow over the land in numerous channels, dug for the purpose ; but for

obvious reasons it has not been generally adopted. The poisonous emanations which proceed from these trenches contaminate the air for miles around, and the soil itself is likely to suffer from over-manuring ; besides, it never could be brought into practical effect except at a very great cost, and in the most incomplete manner, owing mainly to the scarcity of arable lands in the vicinity of large cities. The process of filtration consists in passing the fluid through beds of sand and charcoal, by which it is deodorized ; but the manurial element of the sewage is lost, and this is one of its principal objections. It could only be carried out on a small scale, unless at a cost which would be out of all proportion to the advantages accruing.

By far the best method which has yet been attempted, is the so-called A B C process. This has been in operation for some time in England, and has been carried on by a company called the "Native Guano Company." The works are situated at Crossness, on the southern shore of the Thames. The sewage is allowed to flow into large tanks, and alum, blood and clay are added, by which the solid constituents are precipitated, while the charcoal deodorizes and clarifies the liquid portion, which is allowed to flow into the Thames. The precipitate, which is a muddy kind of substance, is dried by machinery, and constitutes what is called "native guano"—a powdery substance—which is largely used for agricultural purposes. The water which flows away is perfectly clear and free from all impurities. The guano sells at a fair price, and thus is realized a handsome sum of money towards paying for the necessary outlay ; and it is hoped that as experience is gained in this process, and in regard to the value of guano as a manure, it will eventually pay the whole working expenses. This is undoubtedly the most satisfactory, in all its results, of any of the processes hitherto tried, and one which is likely to come into general use in all civilized communities. It opens up a new industry, and one which it is hoped may ultimately prove highly remunerative.

COMBINED EXTERNAL AND INTERNAL, OR, BI-
LATERAL VERSION.

Dr. W. S. Richardson, of Boston, lately read a paper on the above subject, before the Massachusetts Medical Society, in which

he claimed for Dr. Wright, of Ohio, the credit of the plan of version by the combined external and internal method. This has called forth a letter from Dr. J. Braxton Hicks, of Guy's Hospital, London, published in the *Am. Journal of Obstetrics*, in which he refutes this statement, and claims for himself priority in regard to this plan; and states that Dr. Wright, according to his own published statement, only used the internal hand, not even mentioning the *external one*. The distinctive point of the plan introduced by Dr. Braxton Hicks, is, that *both hands are used together*, one supplementing the other; so that, when the internal hand begins to lose power, the external one gains power, and *vice versa*.

This principle was applied by him to both partial and complete version; and it is a curious fact that, in the practice of neither German nor other obstetricians, has the use of both hands simultaneously been described. The only use of the external hand has been, hitherto, to steady the uterus, to prevent recession. He also claims that, before his description, no author had described complete podalic version, without passing the hand internally, with both hands, in such a manner that one might choose which pole of the fœtus should be made to present. According to his plan, he requires only to pass one or two fingers into the os, and bring the head, by the external pressure and internal fingers, down to the os, and retain it there till the gentle uterine contractions have confirmed the new position. The following case is from Braxton Hicks' work on External and Internal Version, Case 16. "In this case, premature labor had been induced at the seventh month for contracted brim. At about thirty-six hours after the introduction of the sponge-tent, the membranes rupturing, I was summoned, and found the os uteri the size of a crown-piece, with the back of the thorax presenting. On passing the two fingers into the os uteri and placing the other externally on the lower part of the abdomen, I was able to make out the head lying toward the right side. By pressing it downward from without it impinged upon the two fingers within the os, and thus the head could be moved about at will, and was placed at the os uteri. It was then observed that the funis had passed down by the side of the head. I instantly replaced it by the internal hand and pressed the head into the os with the outer hand, which was done with great ease. By continuing the pressure for a half-hour, the funis was permanently kept up and the head remained firmly in the natural

position. The pains being feeble and secale failing to act, the long forceps were applied, and the child was born alive and the patient did well."

NOTES AND COMMENTS.

THORACIC ANEURISM TREATED BY GALVANO-PUNCTURE.—

Dr. McCall Anderson, in the *Glasgow Med. Journal*, Feb., 1873, mentions a case of thoracic aneurism, in which electrolysis was had recourse to as a last resort. A Stohrer's battery was used, with only a single insulated needle connected with the positive pole. The point of insertion was previously frozen by means of Richardson's spray apparatus. A zinc plate, connected with the negative pole, was placed on the chest, about seven inches from the point of insertion of the needle, and separated from the walls of the chest by a sponge dipped in salt and water. This was repeated four times, and the result was the reduction of the tumor to one-fourth its former size. It became quite solid, and firmer than the surrounding structures, while the pulsation and systolic murmur became less distinct, the purring tremor entirely disappeared, and the patient was relieved of all pain and discomfort, and felt in perfect health. Dr. A. thought that, in carrying out the operation, the object should be to induce only a partial coagulation, in the hope that this might be followed by a slow deposition of fibrin in successive layers. Sudden coagulation would tend to produce inflammation and sloughing.

DETERMINATION OF THE LIFE OR DEATH OF THE FŒTUS.—

Dr. Cohnstein (in *Arch. für Gynäk.*, vol. iv. 3rd part, 1872) (*Med. Record*, Lond.), states that the information whether the foetus is living or dead during pregnancy, but especially during parturition, is often of the greatest importance; and where hearing the foetal heart and feeling the foetal movements fail, or are uncertain, ascertaining the temperature *in utero* will often very materially assist if not decide us in determining the question. It is a fact that the temperature of the foetus *in utero* is higher than the maternal temperature; and experience proves that the careful introduction of the thermometer into the uterine cavity, between the membranes and the wall of the uterus, is unattended by harm. We have thus a ready mode of settling the question when it is otherwise doubtful.

CEREBRO-SPINAL MENINGITIS.—This disease is at present prevailing as an epidemic in the Province of New Brunswick. It is at present limited to the neighborhood of Moncton, although a few cases have appeared in St. John; a few cases have also occurred lately in the western part of this Province. It is also prevalent in the Western States, particularly in Kansas. It appears to be very erratic in its course, appearing and disappearing in different parts of the same State or Province, at different times, without seeming to travel in any particular direction. In the cases that have occurred within the past two months, the mortality has been very great. Prof. Loomis, of New York, who has had considerable experience in the treatment of this affection, gives the following:—Sol. saturat-potass bromide, minims xl. every two or three hours; quiniæ sulph., grs. iij. to v. every three hours; ice to the head and spine; blisters to the nape of the neck; bleeding, when the constitution of the patient will admit of it, and tonics during convalescence.

SUPERFŒTATION PHYSIOLOGICALLY CONSIDERED.—Professor B. E. Shultze, of Jena, a prominent gynæcologist of Germany, in a lecture on twin gestation, remarks:—

“The most weighty physiological objection to superfœtation consists in the fact that during the existence of pregnancy the development of new ovuli in the ovaries ceases entirely. Not a single exception to this rule has ever been established by observation. The ovaries of females deceased during pregnancy, or after delivery, have been submitted to careful observation; but all pathological anatomists agree that in all such cases the corpus luteum of the last pregnancy can easily be discovered, but no follicles which have ruptured at a later period.”

THERAPEUTIC VALUE OF GELSEMINUM.—This remedy is very highly spoken of in the treatment of various inflammatory diseases. It appears to exert a marked influence in relieving the congestion and controlling inflammatory excitement. It has been administered in dysentery, combined with opium and rhubarb, with very beneficial effects, even in the gravest forms of the disease. In gonorrhœa and ophthalmia of a highly inflammatory nature it has been found of signal service, by relieving the congested state of the vessels and promoting resolution.

THE TRANSFUSION OF BLOOD.—The Transfusion Committee, appointed by the Obstetrical Society of London, has adopted the following programme of its aims and objects:—1. To collect evidence from gentlemen who have had experience in cases of transfusion. 2. To obtain the particulars of all recorded cases (performed on the human subject), with the view of finding out, as far as possible, to what extent the so-called successful cases were due to transfusion. 3. To examine the various kinds of instruments used in both the mediate and immediate forms of the operation. 4. If considered necessary, to institute further experiments for the purpose of determining how far transfusion may be relied upon as a means of saving life, and also the best mode of performing the operation. The Committee will be happy to receive communications on the subject, which should be addressed to the honorary secretary, Dr. Madge, at the Society's Library, 291 Regent Street, W.

ELECTRO-THERAPEUTICS IN CONSTIPATION.—Dr. Cade, (*Lyon Medicafe*, No. 4, 1870), (*Southern Med. Record*) mentions the case of a lady of eighty, affected with habitual constipation which arose after dysentery, from which she had suffered at the age of twenty years. The author having tried various remedies for several months, and when the patient was in great danger of her life, he bethought himself that the sole method of causing peristaltic motion was electricity. Using the apparatus of Gaiffe, he applied the negative pole to the rectum, and the positive pole to the umbilicus. The induced current was made to act for twenty minutes, commencing with the least intense, and increasing up to No. 5 of the graduated. The sitting, although long and painful, was well supported, and the author had the satisfaction of seeing the patient relieved of her constipation by an abundant evacuation of solid fæces.

THE PLEA OF INSANITY.—We beg leave to call attention to an article on the above subject in the Feb. number of the *Lancet*, by Dr. Clark, of Princeton. The "plea of insanity" would not so often be urged if the same course were always adopted as in a recent case in Massachusetts, in which application was made to the court for the discharge of a person from the lunatic asylum who had been sent there for having committed murder in a fit of "temporary insanity." The judge instead of doing that, however, handed him over to the civil authorities to be tried on a *sane* basis.

REMOVAL OF A NEEDLE FROM THE HEART.—In the *Medical Press and Circular* (Feb. 26) is given an instance of a man who for nine days followed his ordinary occupation, in pain and discomfort, having a needle fixed in the tissues at the apex of the heart. On the ninth day, in consequence of his statement and in view of the pain he was suffering, an incision was made over the fifth intercostal space, and the broken eye of the needle was found on a level with the intercostal muscle. This extremity was seized, and the foreign body was withdrawn. The patient recovered without an unfavourable symptom. With this history the exact position of the needle in the wall of the chest is given, as also is that of its probable position in the heart; the movements of the foreign body, caused by those of the heart are figured, and their measurements are added. Some remarks are made upon recovery and duration of life after somewhat similar injuries, and an appendix of cases is given in the form of a table.

BAPTISIA TINCTORIA IN TYPHOID FEVER.—Edward Duffield, M. D., in the *Medical Record*, gives the history of two bad cases of typhoid fever, where, after trying nitric, and sulphurous acids with quinine and extract of belladonna, and the turpentine emulsion, and failing to relieve, or even make any decided impression on the disease, he at last resorted to the baptisia tinctoria, or wild indigo, with decided success. He says: "Whilst we do not desire to be over-sanguine, and are frank to admit that its trial in ten or eleven cases is not sufficient to establish its full value; yet, it is sufficient to assure us of its power thus far, and to ask that the medical profession shall give it a full and fair trial for themselves,"

A FRENCH LAW OF PRIMOGENITURE.—The French War Minister, General Cissey, has promulgated a curious decision, in which he has settled the question of the seniority of twins in a manner satisfactory to himself, although contrary to physiology. It has been established physiologically that of twins, the later to see the light is the elder. General Cissey has decreed that henceforth the infant which comes first into the world shall be considered the eldest, and summoned in that quality to serve in the ranks. Although physiologically unfounded, the decision has the merit of counting the existence of a man from the moment he first appears on earth.

REPORTS OF SOCIETIES.

COUNTY OF BRANT MEDICAL ASSOCIATION.

The quarterly meeting of this Association was held, in the Kerby House, Brantford, on Tuesday, the 3rd ult., there being a large representation of the medical men throughout the county present. There was also a number of visitors present, by invitation, among whom were Dr. Rosebrugh, of Toronto; Dr. Turquand, the late President of the Medical Council; Dr. Clarke, representative of the Gore and Thames division in the Council; Dr. Wiggins, Principal of the Blind Institute, and others. Dr. Henwood, the President, in the chair. Dr. Philip, the Secretary, before reading the minutes of the last meeting, made a few remarks in introducing the visitors, alluding to their standing in the profession, and that it was a hopeful sign of the future prosperity of the Association when they were able to bring to any one of their meetings so many distinguished members from a distance. The proposed amendments to the Ontario Medical Act were discussed at great length, Dr. J. Y. Bown leading off in a very able speech, objecting to most of the proposed changes, and especially the "annual licence fee." Drs. Griffin, Turquand, Clarke, and several others, also took part in the discussion, after which a resolution condemnatory of the proposed changes was passed and ordered to be sent to the Registrar.

Dr. Rosebrugh, who was present by invitation, gave an address upon the uses of the Ophthalmoscope. Several of the pupils of the Blind Institute and others were present, and were examined in presence of the Association, each of the members being afforded an opportunity of viewing the diseased structure. A vote of thanks was cordially passed by the Association to the doctor, for his kindness in being present upon this occasion. The Committee formerly appointed to carry out the establishment of a public Dispensary for Brantford, was re-appointed, to enter into negotiations with the Board of Health of the town, which latter was empowered on Monday evening last, by the Council, to make the necessary arrangements with the Medical Committee. This has long been a great necessity in Brantford, and we hope soon to see the Dispensary in full operation, and we have no doubt, under the present vigorous management, but that it will soon be in thorough working order. A

Committee was appointed to draw up a tariff of fees, to be adopted at the next meeting of the Association. A branch Medical Society, for the town of Brantford, was recommended, and will be adopted at the next meeting. The reading of papers was postponed until the next regular meeting, as the discussion of the proposed amendments to the Medical Act occupied necessarily a great deal of time. A large amount of miscellaneous business was disposed of, after which the Association adjourned, to meet again on the first Tuesday in June.

CANADIAN INSTITUTE, MEDICAL SECTION, TORONTO.

FRIDAY, Jan. 24, 1873.

Dr. A. D. Williams read a paper on "Chloral Hydrate," giving in detail the preparation and pharmaceutical properties of the drug, and the physiological, therapeutic and toxic effects of its administration. He cited several cases of tetanus, in which its use had proved successful. It was advisable to exercise care in giving the hydrate with opium, for its action upon the encephalon was likely to prove excessive if the system was under the influence of the narcotic. The comparatively slow elimination of the hydrate, as found in Dr. B. W. Richardson's experiments, also pointed to the likelihood of injurious effects ensuing if the remedy were given in frequent doses for a length of time.

FRIDAY, Jan. 31.

Dr. Archibald introduced the subject of "Delirium Tremens," and gave a resumé of his experience. He had an unfavorable opinion of chloral hydrate, and had decided to discard opium. In several instances, narcotics had seemed to him to aggravate the patient's condition. He had seen one patient through a number of attacks, and found that the so-called expectant proved the most satisfactory; nutritives, laxatives, etc., being judiciously administered. He had therefore decided to adopt this plan in future cases.

Dr. Coleman considered that inanition was an active element in the causation of delirium tremens, and thought that the small number of cases occurring amongst those committed to houses of correction, etc., where the inmates as a rule were provided with an abundant supply of good food, corroborated this view.

Dr. N. Agnew prescribed neither alcohol nor opium, but gave calmatives, cholagogues, etc.

The prevailing opinion, elicited by the discussion, was in favor of a supporting and expectant treatment, and of withholding alcoholic stimulants and powerful narcotics.

The meeting adjourned to the ensuing Monday evening, to consider and revise the proposed medical tariff.

MONDAY, February 3, 1873.

The Tariff was considered, and altered so as to harmonize, as far as possible, with the suggestions of various members of the profession, who had been consulted in regard to it.

The Secretary was instructed to furnish the medical men of the city with copies of the amended Tariff, for their consideration prior to the public meeting.

FRIDAY, February 28, 1873.

Ordinary meetings resumed after an interruption due to the holding of public meetings, to consider the Medical Bill, Tariff, &c.

Dr. Geo. Wright read a paper on "Acute Rheumatism." In reviewing the remedies usually administered, he expressed himself in favour of Alkalies, and in the more chronic form, of Iodide of Potassium, as being the most suitable, and in the majority of cases sufficient. There is, however, no remedy applicable to all cases, there is no specific. In some cases no remedies seem to be of any avail, and the treatment is most unsatisfactory. He also referred to an interesting instance of *ptyalism* in one of his patients under treatment by colchicum. From the behaviour of the case there could be no doubt that the salivation was caused by this drug.

A discussion followed, in which Dr. W. W. Ogden stated his preference for chino-colocynthin, especially in rheumatic gout. Dr. Coleman favored the use of Tinct. Ferri. Chlor.

MARCH 7, 1873.

Dr. Reeve read a paper on "Diseases of the Ear," touching upon the frequent occurrence, importance, and effects, immediate and remote, of this class of affections, and the impropriety of neglecting them; advantages of improved methods of diagnosis by mirror, speculum, turning-fork, &c., and their bearing upon treatment; various points in treatment—removal of polypi by snare, excision of tonsils, use of post nasal syringe in preference to nasal douche, &c.

Dr. Roseburgh referred to the use and value of Valsalva's method, and to the amenability of ear-disease to treatment if this be

begun early. Dr. Coleman alluded to some difficulties in the use of the turning-fork, and also to Hinton's method of cleansing and treating the middle ear.

MARCH 14, 1873.

Dr. Oldright introduced the "Treatment of Placenta Prævia," and referred to the ordinary methods of treating Placenta Prævia—
 1. Simpson's method of separating the placenta from the walls of the uterus. 2. The more usual method of detaching one side, and turning. He had also seen a few days ago in Churchill, reference made to a method of passing the hand through the placenta and turning, of which Churchill disapproved. The speaker then described the treatment he had adopted in a case a year or so ago. The usual palliative treatment (the hemorrhage subsiding) until labor really set in. As soon as it was apparent that this was the case, a full dose of fluid extract of ergot was given, and the *finger passed through the placenta*, allowing the waters to escape on its withdrawal. The advantages claimed for this plan were, (1) that the head (or presenting part) of the foetus is speedily brought down upon the placenta and upon the enlarged vessels at its attachment, acting as a sort of tourniquet upon their bleeding mouths. (2) The area of the uterine walls are speedily lessened, and the portion occupied by the placenta shares in this lessening, and the walls of the vessels are brought into apposition.

A discussion ensued, in the course of which Dr. Riddell alluded to the method of plugging the vagina with cotton, dipped in a strong solution of alum, and giving ʒss. doses of Plumbi. Acetas. It was objected to this plan, that the confined blood would dissect backward, separating the placenta and dilating the uterus. Dr. Coleman alluded to the theory of Dr. Barnes, who does not think that the cervix enters into the formation of the uterine chamber during gestation, and that it is the enlarging of the placenta without a corresponding enlargement of the cervix which causes the hemorrhage. Barnes' plan is, therefore, after puncturing with a stilette or quill to allow the liquor amnii to escape, to detach the placenta from around the edge of the cervix only, and allow the labor to proceed. The foetal circulation is thus not arrested; and he had effected the delivery of the child alive in twenty-nine successive cases. Several members testified to their personal observation that the cervix does flatten out to form part of the general cavity.

BOOKS AND PAMPHLETS.

CLINICAL LECTURES ON DISEASES PECULIAR TO WOMEN. By Lombe Atthill, M.D., University Dublin. Fellow and Examiner in Midwifery, King and Queen's College of Physicians, etc., etc. Second edition, revised and enlarged with six lithograph plates and wood-cut illustrations. Philadelphia: Lindsay & Blakiston; Toronto: Copp, Clark & Co. Price in cloth \$2.25.

The above is a work of about 240 pages, and contains the views of a practical worker and teacher of the diseases of women. It is printed on toned paper, well bound, and in a compact form. It deals chiefly with diagnosis and treatment, and is a condensed epitome of the experience of twenty years' clinical observation. The clinical character of the work admirably adapts it to the wants of students and young practitioners. These lectures were first delivered at the Adelaide Hospital, Dublin, and were subsequently printed for the use of the students in attendance there.

THE SCIENCE AND ART OF SURGERY. By John Eric Erichson, Senior Surgeon to University College Hospital, London. New edition, revised and enlarged by the author; 700 engravings on wood. Philadelphia: H. C. Lea; Toronto: Copp, Clark & Co.

The present edition comprises a work of 2000 pages, and is in two volumes, the first embracing first principles and surgical injuries, and the second surgical diseases. This book has been long and favorably known to the profession, and it is, therefore, unnecessary to give a detailed account of the subjects treated. The present edition places the work fully abreast of the times in all the improvements of modern surgery. Many chapters are re-written and re-arranged, and much useful matter has been added, while many of the errors of the former edition have been corrected. The description of Syme's amputation at the ankle-joint has been changed so as no longer to mislead, but unfortunately the objectionable illustration remains. The chapter on inflammation and its results is changed to suit the advanced ideas of pathology, and the antiseptic treatment of wounds is fully given. An account of the transplantation of cuticle is also added. Diseases of the jaws are also more fully treated, and one or two new and useful illustrations of the methods of excision are given. The style of writing is pleasant and easily understood, the type clear, and the mechanical execution of the work all that can be desired. This work has always been held in high estimation in the past, and the present edition fully entitles it to the continued confidence and support of the profession as a work of reference. It is undoubtedly deserving of a place in every surgeon's library.

THE PRACTICE OF SUGERY. By Thos. Bryant, F.R.S., Surgeon to Guy's Hospital, London, with 507 illustrations. Philadelphia : H. C. Lea ; Toronto : Copp, Clark & Co.

This is a work of about 1,000 pages octavo, and differs in many respects from the ordinary Surgical Text Books of English authors. It contains upwards of 500 illustrations, 400 of which are original and copied from preparations or drawings in Guy's Hospital Museum, or copied from nature. This is a most interesting feature of the book, and one which should commend itself to every practising Surgeon. The practice he inculcates in his work has in most points been tested by experience. He also gives the statistical results of many of the more important and hazardous operations, for the guidance of others; and these are also drawn chiefly from the records of Guy's Hospital. No subject has been omitted which comes under the notice of the general surgeon, except the recognized specialities of the eye, ear, and dental surgery. To have given them in outline, he says, would have been to mislead, and to have done more would necessarily have added much to the size of the volume. The surgery of the urinary organs is very fully treated of, especially the subject of lithotrity. The various amputations, as to situation and mode of operating, are concisely, yet clearly, given. The author prefers Pirogoff's operation to Syme's in all cases in which the os calcis is sound. The profession really owes a deep debt of gratitude to Dr. Bryant for placing in their hands such a mass of new facts, illustrations and opinions, expressed in clear and comprehensive terms, as are embodied in this work. The only wish we have to express regarding the book is that a little more care had been bestowed on the wood-cuts.

SWAYNE'S OBSTETRIC APHORISMS. Second American edition, from the fifth revised English edition, by G. R. Hutchins, M.D. Philadelphia : H. C. Lea ; Toronto : Copp, Clark & Co.

DENTAL CARIES, AND ITS CAUSES. By Drs. Liebre and Rottenstein. Translated by Thos. H. Chandler, D.M.D. Philadelphia : Lindsay & Blakiston ; Toronto : Copp, Clark & Co. Price \$1.50.

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**TABES DORSALIS, PROGRESSIVE LOCO-MOTOR
ATAXIA, OR, POSTERIOR SPINAL SCLEROSIS.**

BY WALTER LAMBERT, M.D., AMHERSTBURG, ONT.

This malady was first described by Dr. Todd, in 1847. In contradistinction to paraplegia, he said, "that two kinds of paralysis might be noticed in the lower extremities: the one consisting simply in the impairment or loss of voluntary motion; the other distinguished by a diminution or total absence of the power of co-ordinating movements. In the latter form, while considerable muscular power remained, the patient found great difficulty in walking, and his gait was so tottering and uncertain that his centre of gravity was easily displaced." The latter he called "Tabes Dorsalis."

About the year 1858, M. Duchenne commenced to publish a series of articles on this disease, which he thought to be entirely new, and he called it "Ataxie Locomotrice Progressive," en Anglais, "Progressive Loco-motor Ataxia." He named it Loco-motor Ataxia (*a*, primitive, and *taxis*, order) on account of the deficiency in proper co-ordinating power in locomotion; and progressive, because at that time the disease almost invariably progressed "from bad to worse," until the patient "shuffled off this mortal coil."

Since then, the disease has been a good deal studied and written upon by the medical men of England. Among the number, I may mention Drs. Radcliffe, Julius Althaus, Johnson and Jackson. The first and second have given us good articles upon it; but no one, up to the year 1867, had succeeded in making a perfect cure from it. Prof. Flint, in his admirable work on practice of Medicine, after describing Loco-motor Ataxia in his most lucid manner, says, "the prognosis is as unfavorable as possible. The most to be hoped for, is, that it will remain stationary or advance very slowly."

In the autumn of 1868, I had my first patient of this disease, and succeeded in curing her; which I published in the February, 1869, number of the *New York Medical Journal*,—the first perfect recovery, I believe, on record. Since then, Prof. Hammond has perhaps given us the best description of this malady yet published, in which he claims to have cured 5 out of 91 that he has treated. He calls the disease "Posterior Spinal Sclerosis," designating it by the lesion, and not by the symptoms; the lesion being sclerosis of the posterior roots of the spinal nerves, or wasting of the posterior columns of the spinal cord.

SYMPTOMS.—This disease has no uniform set of initial symptoms. Sometimes it begins with dull, heavy pains in the small of the back or other parts of the spinal column, which are very soon followed by sharp, elastic-like pains, which shoot down the limbs along the course of the nerves, and which are very generally taken by the patient for twinges of neuralgia or rheumatism; or it may be first manifested by a sense of constriction around the lower part of the chest, or abdomen, as if a cord were tied tightly around the body of the patient. With Major D., my third patient, the first thing that disturbed him was (being awake at night) pains running down the outside of the legs and along the outer border of the foot. This was soon followed by a sense of constriction around the lower part of the chest. In some cases, the first symptoms are cerebral, and may consist of attacks of vertigo, epileptic fits, disturbances of vision, defective accommodation and amaurosis. My second patient, Thomas C., suffered from this symptom, or rather disease, for about fifteen months, before the ataxic symptoms manifested themselves. At other times, the stomach and bowels are the first to speak out; there may be vomiting, diarrhoea or constipation. Finally, the first symptoms may be connected with sensibility, giving rise to anæsthesia and the various abnormal sensations connected therewith.

If the lesion, as is generally the case, exists in the dorsi-lumbar region of the cord, the first symptoms of anæsthesia, perverted sensibility or ataxia are noticed in the feet ; a common feeling is as if the toes are too large for the shoes, and sometimes as if there were air-bubbles between the soles of the feet and the shoes ; sometimes there are burning pains in the soles of the feet, and very generally "pins and needles" and other forms of numbness.

One curious symptom that Prof. Hammond has frequently noticed, is that, not only is the sensibility lessened, but the transmission of sensitive impressions to the brain does not take place with the normal degree of activity. In a lady patient of his, a pin stuck into the calf of the leg was not felt for fourteen seconds on the right side, and sixteen on the left. In another patient, in hospital, if the feet were put in hot water, the sensation was not felt for about three minutes.

When the lesion is above the origin of the brachial plexus, the ataxia and anæsthesia will be first manifested in the upper extremities. One lower limb is sometimes affected before the other, and the two lateral limbs may be first affected. When one limb is first affected, whether it be a lower or an upper extremity, it is on the left much oftener than on the right side. In Major D.'s case, the left leg and right arm were the most troubled with anæsthesia. The ability to feel pain is not only diminished, but there is a notable abatement of tactile sensibility. In using the æsthesiometer, we found that the two points could be widely separated, and a single impression only be felt on parts of the body which, in the normal state, would give the sensation of two points at a much less distance apart. But the most marked symptoms, those which might be termed pathognomonic, and by which the disease is most easily recognized, are those that relate to motility. In the commencement of the malady, there is no loss of motor power ; but there is an inability to co-ordinate the muscles to bring them into harmonious action, and thus execute with precision the various voluntary movements.

The effect of co-ordination is apparent when any combined movements are undertaken. Thus, in the act of standing, a great many muscles are simultaneously made to contract, and each one to just that necessary degree which is essential to maintain the body in the erect posture. Very often the first evidence of motor diffi-

culty is experienced in regard to this faculty of standing, not so long as the eyes are open and directed towards the feet ; but the moment the eyes are closed, the patient loses his equilibrium and down he tumbles.

In proportion as the affection is marked, the patient's gait in walking is uncertain, irregular and grotesque. The lower limbs are thrown forward by forcible jerks, without any definite direction ; the body is swayed from side to side in the attempts to maintain an equilibrium, and the arms are thrown out like those balancing on a tight-rope. In cases less marked, the greatest difficulty is experienced in beginning the walk, and, after getting under way, the patient is unable to advance slowly, but walks with precipitation or falls into a running gait. Notwithstanding the violence of the exertions, the muscular strength being retained, patients are sometimes able to walk long distances. The muscles of the lower limbs are generally less developed than those of the upper and trunk ; but there is no appearance of wasting in them. Their electro-motility is perfect ; they stand out hard and firm when made to contract by the will, and the contraction seems every whit as strong as it ought to be. Indeed Major D. could, while in the sitting posture, put out either foot in any direction, and there hold it as firmly, or nearly so, as one in health ; and yet he was not able to stand alone.

When the lesion is above the origin of the brachial plexus, there is the same difficulty in the upper as in the lower extremity, in co-ordinating the muscles into harmonious action. The patient finds that the ends of the fingers have lost, to some extent, their acute sensibility, and there is restraint in the management of the fingers. He experiences these difficulties in picking up a pin, in writing, and in other actions requiring nice manipulation ; for instance, if he attempts to carry a glass of wine to his lips, he spills a portion of the contents, and if told to place his finger on a particular part of his face, the movement is accomplished with a wabbling motion, and the finger is darted suddenly to the part as it approaches it.

A phenomenon is often noticed as regards the upper extremities, which also exists in the lower, but which cannot be so readily manifested, and that is, that the patient loses the ability to distinguish even considerable differences between weights. An ataxic person, with the upper limbs affected and eyes closed, may

have an ounce weight put into his hand, and if in a few seconds it be removed, and a half-ounce one substituted, he will not be able to tell correctly which is the heavier. Or both hands may be extended, and the two weights placed simultaneously in them.

Paralysis of the bladder is a common circumstance, and the sphincter is frequently affected; incontinence of urine, spermatorrhœa and anaphrodisia are pretty constant symptoms. On the other hand, there may be in the early stages of the disease a morbid excitability of the sexual organs, to such an extent, in some cases, that the sexual desire is almost inextinguishable.

Death may take place, either as the direct consequence of the lesion of the spine, or as the result of some inter-current affection, such as bronchitis, pneumonia, dysentery or phthisis.

CAUSES.—The etiology of this disease does not seem to be thoroughly understood. It has been attributed to venereal excesses, and undoubtedly it is in a fair proportion of cases; but this is not as common a cause as has generally been supposed. Of 91 cases which came under the observation of Prof. Hammond, he gives inordinate sexual indulgence as the cause in seven, injuries in four, standing in a constrained position in three, a syphilitic taint in three, undue mental exertion and anxiety in two, and in the remainder there was no assignable cause. Of the three cases which I have been called upon to treat, I think the cause of the first was exposure to wet and cold while menstruating, probably predisposed by the anæmic state in consequence of living in a malarious district; the second from violent exercise and irregular meals, and perhaps cold, as he first felt the amaurosis after taking a long drive in the cold, when he became very much chilled; and the third from excessive use of tobacco, and perhaps assisted by undue mental exertion and anxiety; he also resided in a malarious district and had been subject to ague.

DIAGNOSIS.—Ataxia, it is said, may be confounded with several diseases, especially with simple loss of muscular sensibility, disease of the cerebellum, general paralysis of the insane, general spinal paralysis and common paraplegia, saturnine paralysis, Cruveilhier's disease, paralysis agitans, and with chorea and some other affections of the kind; but fortunately, as a rule, very little attention will serve to prevent such confusion. Simple loss of "muscular sense" has been supposed to be the cause of ataxia, and undoubtedly this

malady is frequently associated with ataxia, and most easily confounded with it. In simple loss of "muscular sense," the sight can supply what is lost, and thus when the eye is open and the attention alive, the involuntary co-ordinate movements, as well as the voluntary movements of the affected muscles, are all executed regularly.

In disease of the cerebellum, the patient reels and rolls about in walking as if he were giddy or drunk, without any peculiarity in the manner of placing his feet; while, in the ataxic patient, the gait is staggering and precipitate; the legs are thrown about vaguely and spasmodically, and the heels brought down with force at each step, the muscles acting with a sort of jerk or spasm; there appears to be a want of balance between the flexors and extensors in each leg, the flexors having the advantage. A patient with disease of the cerebellum can stand and walk better with his eyes shut than with them open, for the vertigo is not, in the former condition, felt to the same extent. The reverse is true in posterior spinal sclerosis.

In general paralysis of the insane, the hesitation in speech, the tremulousness of the lips and tongue, the general tremulousness, the true paralytic weakness of the muscles as to voluntary movement, and the mental condition of the patient, must readily serve, to prevent the unsteadiness of gait and other evidences of disordered co-ordinate movement, from being confounded with those which occur in ataxia.

In general paralysis of the spine and in common paraplegia, there is true paralysis, more or less complete, of the muscles as to voluntary power; and the muscles, moreover, are much damaged as to their nutrition and contractility, and generally as to their sensibility too. Generally there is tenderness in some part of the spine, and perhaps pain in the same region. The gait is quite different, being hampered, slow and dragging, each leg being brought forward with evident difficulty, and the part of the foot first brought in contact with the ground being, as a rule, not the heel, but the toes.

In saturnine paralysis, it is the voluntary power over certain muscles which is impaired and gone, and the muscles are atrophied and deprived of electric contractility when the malady has reached its height.

In Cruveilhier's disease, the wasted muscles are changed in a great measure into fat, and as it were dissected away, and any errors in movement are such as may be accounted for by this atrophy and

absence; whereas, in ataxia, the muscles are plump and to all appearance perfectly healthy, and the errors in movement are those which refer to want of co-ordination.

In chorea, there is a great want of co-ordinating power in the muscular movement, but the rest of the history is quite different from that of ataxia, it generally being one arm or one leg that is affected; at least I have found it so, and I have treated a good number afflicted with this disease.

In paralysis agitans, the general features of the disease are more akin to those which are present in general paralysis, than to those which are characteristic of ataxia.

PROGNOSIS.—The prognosis is very unfavorable. Some may be restored to health, quite a few ameliorated, and perhaps in more we will be able to retard the onward progress of the disease. In the year 1866, Dr. Julius Althaus wrote “the prognosis is not favorable, for up to the present time not a single case is on record in which perfect recovery has ensued.” Much must depend upon the period at which the case comes under treatment. If all the symptoms are fully developed, the hope of cure will be slight; although even then much may be done to alleviate the patient’s suffering. The case is different if the patient presents himself in the early stage of the disorder. The fact that the cerebral nerves, with the exception of the optic, and that, too, occasionally, generally recover from their affections in the course of the disease, goes far to prove that, previous to the structural changes in the cord, there is a functional stage in which much may be done by medicines. The disease rarely occurs before 30, and more often in males. Of my three cases, two were males, aged 35 and 40 (when the disease commenced), and the other a female, aged 22.

MORBID ANATOMY.—The anatomical characters of this affection consist of atrophy and degeneration of the posterior columns of the spinal cord, involving both the grey and white substance, or either, and the posterior roots of the spinal nerves. The cerebral lesions are met with in the lower cerebellar peduncles, in the restiform bodies, in the optic thalami, optic nerve and motor oculi, and sometimes the abducens and auditory.

TREATMENT.—The medicines found most useful in this disease are ergot, phosphoric acid, strychnia, nitrate of silver, bromide of potassium, iodide of iron and cod-liver-oil. Methodically used, not

all at once, but separately and as each patient's symptoms and idiosyncrasy may indicate.

Electricity, by many, has been found useful, both by Faradization and the continuous current passed from the spine to the feet. In my first patient, I succeeded with the acid phosphoric-dil., alternated with the pyro-phosphate of iron, and the daily use of Faradization. My third patient had his disease arrested by the acid phosphoric-dil., followed by ergot. The latter medicine seemed to act specifically upon the genital organs, and arrested the spermatorrhœa with anaphrodisia. Nitrate of silver has been lauded by some. My second patient had taken it for a year steadily for amaurosis, before the ataxic symptoms manifested themselves.

CASE I.—The following is the report of my first case, February, 1868 :—Miss Fanny B., aged 22, had been suffering slightly with anæmia and scanty menstruation for about one year. At different times, she took ferruginous preparations, with decidedly good effects ; but, as soon as relieved, she would leave off taking the medicine, and her trouble would return. She also had ague once or twice during the summer, it being very prevalent at that time in the neighborhood. For it she was specifically treated, and from it she soon recovered.

For the chlorosis, I sometimes gave *mist. ferri comp.* (Griffith's), sometimes *tinct. ferri* and *quinia disulph.* ; lastly, I was giving her *syr. ferri iodidi*, with cod-liver-oil. In September last, from exposure to wet and cold, her menses ceased, and all the symptoms of progressive loco-motor ataxia set in. Her parents, who live in the country, came for more medicine, and casually told me that their daughter walked with great difficulty, and that her menses did not come on at their usual period ; consequently I went to see her, and in her attempting to shake hands with me, she grasped me by the wrist. This excited my fears immediately that she had Duchenne's disease. Upon further examination, my diagnosis was verified. The patient, in attempting to walk, staggered and swayed her body from side to side, to keep her equilibrium. She would suddenly halt to recover herself, and then would plunge forward, seemingly in a great hurry to reach the point to which she desired to go. She was unable to feed herself, from the want of co-ordinate action of the muscles, and, in fact, unless she was watching her hands continually, she was liable to drop whatever she had in them. Her speech was also affected, she was not able to articulate some words perfectly.

What is passing strange in this case is, that I was giving her syr. ferri iodidi at the very time that the disease manifested itself ; the very medicine that Dr. Julius Althaus used with so much benefit in his case, the only one recorded, until lately, that had been much benefitted by medicine.

As soon as I recognized the disease, I gave potass-bromid. grs. xv., ter in die, and submitted the patient to the action of magneto-electricity, once every twenty-four hours. I also gave two pills of aloes and iron, which produced too much relaxation, the effect continuing two or three days. This, in fact, seemed to prostrate her to such an extent that she was obliged to take to her bed, and there remain for a time. Fortunately, just then I received the September number of the *New York Medical Journal*, and in it saw that Dr. Desjardin Baumetz had given phosphorus in this disease, with excellent effects. I immediately ordered acid-phosphoric-dil., m. xv., ter in die, in simple syrup. The next day her menses came on, and in a short time she began to improve. In a few days I increased the dose to twenty, twenty-five and then to thirty minims. After ten or twelve days, I omitted the acid, and gave her the pyro-phosphate of iron for a week, and then returned to the acid. I continued the electricity every alternate day. In two weeks she was able to sit up, and had sufficient control over the muscles of her upper extremities to be able to knit. In one month she could walk about the house tolerably well. Now (December, 1868) it is something over two months, she can take long walks, do housework almost as well as ever, and has become very fleshy. The electricity has been discontinued for about one month, and she is not at all regular with her medicine at the present time. However, I have the most sanguine hopes that she will perfectly recover. The improvement has been so great, that it is impossible to discern anything wrong with her, except a very slight irregularity in her walk. By the middle of January, 1869, she had perfectly recovered, and has remained so up to the present time (February 2nd, 1873). This was the first case on record, and the first time that phosphoric acid had been used for this malady.

CASE 2.—This patient came under my observation only after he had been an ataxic for about sixteen years. He was a native of Lower Canada ; was a clerk in one of the governmental departments ; married, at least had been, but was at this time a widower ; took

violent exercise at some gymnasium, and had his meals irregularly. His eye-sight failed him suddenly, after a long exposure to cold. After consulting the physicians of Montreal, he was advised to go to New York, where he saw John Kearney Rogers; from thence he went south, and remained some time over a year; was taking the nitrate of silver during this time for amaurosis. He returned to Canada, and then went to London, where he saw Dalrymple; he prescribed nitric acid and nux vomica. For a little while before this, the ataxic symptoms began to manifest themselves. From London he went to Edinburgh, and saw some celebrated oculist there; does not remember name; continued the same treatment. The eye-sight gradually returned, but ataxia of the lower extremities became more manifested. He returned to Montreal, tried to walk off the disease by doing five miles every day, but only succeeded in becoming worse; he had ceased taking medicine long before I saw him. He walks now with very great difficulty, and then only with the support of two canes. He has perfect control of his upper extremities, and tolerably good eye-sight at present; reads a great deal. I tried the acid-phos.-dil. with him with no effect. I concluded that the disease was of too long standing to be at all affected by medicines, and consequently gave him nothing more.

CASE 3.—Major D., a native of Kentucky, 51 years old; married; no children. I will give the history of his illness, before I saw him, during the summer of 1867, in his own words:—"First symptoms of indisposition, constipation of the bowels, loss of appetite and weakness, contracting of the leaders and flashes of pain below the calf of the leg—occasionally extending to the heel and outer side of the foot. Treatment, regulating the bowels and application of Hoskin's liniment. Apparently restored to health by January, 1868; enjoyed good health until the spring of 1869. Again, increase of weakness and dizziness; darting pains returning to my limbs. May 18th, 1868, after over-exertion, was taken with a chill, which lasted several hours, without being followed by fever. Great weakness in my limbs and an increase of numbness in my feet, with but little pain; confined to bed three weeks. Having gained some strength, on foot again, but not able to walk without staggering—bringing the heels down first, with a flopping motion of the foot. Felt a drawing or tightness about the chest; at times had great difficulty in inspiration. In October, applied ice to the spine and

hot water to the feet ; relieved for a time, but did not last. Appetite bad ; nervous and able to sleep but little. In the spring of 1871, not able to walk ; great weakness of my kidneys. (He here means incontinence of urine.) General health pretty good, but gradually less strength in my limbs."—The state in which I found him. He came under my care in September, 1871. Anæsthesia of both upper and lower extremities, more marked in right upper and left lower ; the ends of the fingers, particularly, feel numb ; scarcely able to write even his own name. Perfectly unable to walk, or even stand alone. Appetite bad, and a tendency to diarrhœa ; partial incontinence of urine ; seminal discharges, without erections, in fact, had had no desire for marital intercourse for many months. Sensorial nerves all in good condition. He had chills and fever for a week or two after he arrived here, having come from a very malarious district. I first gave quinine for the chills and oxide of silver for the diarrhœa ; they both soon subsided, and then I prescribed acid-phos.-dil. and elixir of calisaya, strychnia and iron by hydrogen. For six weeks he gained rapidly, recovering his lost appetite, his bowels became regular, the feeling of constriction disappeared ; he once more could write long letters with apparent ease, was able to stand upon his feet and had a return of marital feeling. All at once the progress towards health was arrested, but did not retrograde as it heretofore had done. I then gave the ergot in fluid extract ; this arrested the seminal flow, but had no other discernible effect. He has taken no medicine for about one year now, and remains in the same state, without any retrogression. I did think that he would have quite recovered, if he would have abstained from the use of tobacco, to which he was, and continues to be, a perfect slave.

PISTOL-SHOT WOUND OF THE BRAIN—TEMPORARY IMPROVEMENT—NO PARALYSIS—DEATH.

BY HENRY BOGUE, M.D., RODGERVILLE, ONT.

On the 1st of April, 1871, I was sent for to see P. D., a young man of about 28 years of age, and a resident of the township of Hay, whom the messenger reported as "having been hurt by a bull, and that his skull was fractured." After travelling a distance of five

miles, I reached the house, where my patient was lying on a couch, stretched at full length on his back, bleeding at the nose and mouth ; pulse medium as to volume and momentum ; pupils contracted ; skin cool, clammy and moist ; respiration short and easy, no blowing at the corners of the mouth ; stupor and insensibility complete. The body being examined, no injury could be discovered on any part, except a slight wound on the forehead, somewhat resembling a leech bite, so small and insignificant looking, as to be almost unworthy of attention. I was at a loss to know what to think of the case, when the young man's father informed me that his son had been feeding the bull (a wild, vicious beast) that morning, and that the animal having raised its head somewhat suddenly, struck the point of its horn against his forehead and fractured his skull, as he thought, and produced all the mischief now before us. Nothing more obvious presented itself in the meantime than what the father had related ; and although feeling myself still in the dark, as to the real cause of the mischief, I remarked that in my opinion serious injury had been done to the brain ; and although there were no signs of compression, there must have been fearful concussion, and that, in all probability, he would die.

In the meantime I proposed to enlarge the wound at the injured spot, to see if the skull was fractured or driven in in any part. I supposed the inner table might be driven in on the brain, although nothing could be detected externally to signify such an event. I was about to proceed with this simple operation, when his elder brother suggested that it would be better to have another medical man. Accordingly Dr. Hyndman, of Exeter, was sent for. He arrived in about two hours, during which time nothing was done, the patient remaining the same. We proceeded to examine the skull at the injured part, but could only find, as abnormal, a little round opening, about one-eighth of an inch in diameter, through which brain matter was oozing, and through which the probe moved in all directions and to any depth. In the present state of matters, Dr. Hyndman expressed his opinion that the case was a critical one, and declined to have anything more to do with it. While casting about me what steps I should take next; one of the friends happened to put his hand into the pocket of the patient, and brought therefrom a small pistol. So soon as this was seen, a solution at once appeared to my mind of the whole matter, viz., that the wound was

occasioned by a pistol-shot, either by his own hand or that of some unknown person. No one present had any suspicion of strangers around, and none had been seen that morning, nor had any firing been heard at six o'clock, the time at which the accident occurred. However, enough had revealed itself, to convince all that a pistol-shot wound had been inflicted, and that it was probably mortal. After some little reflection and examination of the patient, we expressed our opinion that he would not recover, although probably he might linger on for a few days, but would die in the end exhausted. In this opinion Dr. Hyndman and I were at one.

Being now entirely worn out, having been in attendance for six or eight hours, and anxious to see some other patients, I left, promising to call if anything new transpired. Partial consciousness returned during the night, and another medical man was called. Considerable amendment took place. I called next morning, when he seemed somewhat better. For the next eight days reports of his recovery were spread abroad, and very marvellous things spoken of him. His powers of observation and comprehension were partially restored. He lingered on for a week or eight days, and then died suddenly.

AUTOPSY.—The body was examined twelve hours after death. On the removal of the calvarium, the appearance of the brain was healthy; on removing the brain from the skull, and slicing down as far as the corpus callosum, nothing unusual was to be observed; but beneath that and the fornix, through the septum lucidum into the left ventricle, a bloody-looking tract was seen, along which the finger could be passed. Upon introducing the finger, something hard was felt in the posterior part of the lateral ventricle, and, upon dissecting down, it was found to be the greater portion of the bullet.

REMARKS.—In this case, no important part of the great nervous centre was injured. Neither the corpora striata, optic thalami, corpora quadrigemina, pons varolii nor medulla oblongata were pierced by the bullet—not even the origin of a nerve injured; in fact, very little of the real brain matter, hence the reason why he lingered on so long. The ball entered the brain in the median line, through the longitudinal fissure, at about half-an-inch above its base, travelling back on a level with the base of the brain as far as the posterior part of the lateral ventricle. His hearing remained, so did his sight, and sense of smell. There was *no paralysis* in any part of the body; speech still remained, until five days after the accident. The heart's

action was good, the lungs clear, and the bowels were moved by means of clysters and medicine.

An inquest was held on the remains, and the following verdict was returned :—"That the said P. D. came to his death by means of a pistol-shot wound of the brain, but by whose hand this jury doth not undertake to decide."

EXTRAORDINARY ANOMALIES IN THE ARTERIAL SUPPLY OF THE UPPER EXTREMITIES.

BY M. HILLARY, M.D., M.R.C.S., IRELAND.

The following very odd distribution of the arteries was observed by me in the upper extremities of a female subject I was dissecting in the Toronto School of Medicine:—

The axillary artery divided in its second portion on both sides into two trunks, and as the ultimate disposition of the artery of one side was somewhat different from that of the other, I will describe the left one first.

The anterior trunk, the smaller, coursed along the arm close to the posterior division, passing rather in front (as it got lower down) of the biceps muscle, and about two inches above the elbow joint divided into the radial and ulnar, both of which passed down superficial to the bicipital fascia, crossed by the superficial veins and nerves at the flexure of the elbow. The ulnar passed down superficial to all the muscles until within one inch of the annular ligament, then it dipped down to join company with its nerve, after which it took a perfectly normal course and distribution.

The radial took its ordinary course, between the supinator longus, pronator teres and flexor carpi-radialis. It gave off the radial recurrent, dividing into *two* branches, one passing up between the supinator longus and brachialis anticus, to anastomose with the superior profunda, the other a minute twig communicating with the interosseous or posterior main trunk in front of the brachialis anticus. The posterior trunk or division assumed the duties of the main artery of the limb, both as to course, relations and distribution of nutritive branches. It first gave off the subscapular, posterior cir-

cumflex (no ant. circumflex) then becoming brachial it gave off at their usual points, the superior and inferior profunda, and anastomotica magna; it then terminated in the common interosseous, which divided into the anterior and posterior interosseous giving off before its division what took the place of the anterior and posterior ulnar recurrens, the anterior anastomosing with the anastomotica magna, the posterior with the inferior profunda.

On the right extremity there was some difference. The posterior main trunk was not as large as on the left, and the branches it gave off were smaller in size and the anastomoses were not so distinct.

The anterior trunk was larger than the posterior, to which it kept a close relation. It divided into the radial and ulnar lower down than on the left side, and these branches were covered by the bicipital fascia. The radial passed down superficial to and separated from its nerve by quite an interval, and did not join it until it arrived close to the annular ligament. This artery gave off at the usual point, the radial recurrent, which divided into *three* branches, one passing upwards, the other a small twig communicating with the interosseous, as on the left extremity, the third branch, a larger one, joined the radial nerve and accompanied it half way down the arm when it lost itself in muscular branches.

The ulnar ran along the inner margin of the flexor carpi-radialis superficial to all the muscles, on the surface of the flexor sublimis, as there was no palmaris longus, the course being in the middle of the arm close to the radial. Almost an inch above the annular ligament it made an abrupt curve inward to the pisiform bone, where it resumed its normal course and relations.

It would be superfluous to state the importance of a recognition of this peculiarity from a surgical point of view.

This is the only instance I can find of such a peculiar division. The division of the brachial into *three* has been rarely seen; in a couple of instances, only, I believe. As they approximate somewhat to this instance I give you the extracts:—

In plate XV of Knox's edition of Frederic Tiedman's plates on the arteries, there is an example given which Tiedman says is very rare. The interosseous being given off from the brachial and the ulnar having a superficial course, in a female subject whose bones were soft. In a foot note he says:—This rare distribution of the arteries

has been observed by Ludwig (l. c. p. 7), Sabatiko (l. c. p. 69) Hildebrandt (l. c. B. 4, page 871), A. Monroe (l. c. vol. iii, page 304 ; the interosseous sometimes arises from the middle of the humeral artery) and Barclay (l. c. p. 104, note w), I have only seen it once.

Sharpey & Ellis's edition of Quain's Anatomy (vol. 2, page 290) foot note—In one instance only the three arteries of the fore arm (R. U. & Interosseous) arose together from the brachial artery at some distance above the elbow joint, (plate 33, fig. 3.) A similar case is recorded by Dr. Barclay.

In none of those instances have any of these great anatomists seen an example such as I have shewn you, and I merely referred to their notes as having a bearing somewhat, as in the present case, on the necessity of a knowledge of those peculiarities for many surgical reasons.

Toronto, March 24, 1873.

CEREBRO-SPINAL FEVER.

BY JOHN CLARKE, M.D., IROQUOIS, ONT.

The following cases of this disease have occurred here lately. I regret that circumstances did not permit my taking notes of the exact symptoms, progress and duration of each, yet the main points are so prominent, that I may trust to memory in reverting to them. It is one of those diseases, for the description of which, a number of superlatives is required.

The first case was that of a robust boy, æt. 16, who, on the 12th January last, about twenty-four hours after crossing the river in a violent storm of snow and sleet, was seized with a severe chill, followed by the usual concomitants of ordinary continued fever. I saw him shortly after, when he was in great suffering, his face very much flushed, tongue coated, the fur, however, not being nearly as thick as in simple fever, excessive and unremittent pains throughout the whole body, but particularly in the head and nape of the neck, the muscles of which were somewhat contracted. The pulse was about 85 to the minute, full, and somewhat jerking. Vomiting, attended with but little nausea commenced a few hours after the inception of the disease, and soon became almost constant and irrepresible. The

symptoms increased in severity for about a week, with the exception of the vomiting, which, after the third day, remitted in violence. Delirium of the busy kind set in early. At the eighth, or ninth day, the cutaneous hyperæsthesia became extreme, more especially over the joints; there were also considerable internal pains in the umbilical and epigastric regions. By this time the pulse had become remarkably slow, about 40 or 45 to the minute, although the appearance of the patient and other symptoms would seem to indicate a range of 120 or 130; each pulsation was quick and had the sensation of a jerk, followed by a recoil. There was also retention of the urine, which became cloudy and albuminous; no coma, but great wakefulness; tongue covered with a very thick, dirty fur. The prostration was so great that a fatal termination was hourly looked for, yet about the middle of the third week the patient began to improve and continued in an improving state for several days, when, owing to injudicious exposure, a severe relapse set in. The tongue, which had cleaned off, became, quite suddenly, dry and hard, and all the symptoms of the primary onset were repeated in a more intense form. Although the prostration was much greater than in the previous stage, in about eight days the patient began to improve and continued convalescent for about a week, when, without any known cause, another, and still more severe relapse occurred, attended with precisely the same symptoms. The exhaustion seemed so great as to preclude any possibility of recovery; however, thanks to the *vis medicatrix naturæ*, the symptoms one by one disappeared, and at last a final and decided improvement took place. The emaciation was extreme. The patient was a stout, well-developed boy, above the average for his age, yet at the termination of his illness, the thickest part of the thigh could be encircled by the thumb and forefinger.

Regarding the treatment pursued, apart from hygienic regulations, very little could be done. In the earlier stages, a few grains of calomel, placed on the tongue, seemed occasionally to act excellently in allaying vomiting, but the effect was by no means uniform. Croton oil, when retained on the stomach, was the most efficient purgative, in doses of two drops producing but gentle purgation, and serving also to modify the head symptoms. Although the cerebral disturbance contra-indicated the use of narcotics, yet the pain was so great and the restlessness so constant, as to demand some

tranquilizing agent, and, with this view, I at first administered chloral carefully, but even in large doses it produced none whatever of its ordinary soporific and quiescent effects. I was obliged, therefore, to resort to some more potent agent, and from morphia, an apparently objectionable drug, found such good effect that I saw no reason to discontinue its use throughout the further progress of the disease. To be effectual, large doses (1 gr. of the acetate) had to be given, and from such doses no bad effects were discoverable, but, on the contrary, pain and restlessness were relieved, sleep often produced, and much support in the later stages derived from its use. Quinine and stimulants were also found to be beneficial after the more prominent symptoms had subsided. No topical applications could be tolerated on account of the extreme tenderness in the cervical region.

The patient is now (March 31st) perfectly cured, and walking about the streets, though in a most woefully dilapidated condition.

The second case was that of his sister, a girl of about 14, who, during the height of her brother's attack was seized with a much more severe form, (*explosive, or meningite foudroyante* of the French authors), in which all the symptoms were intensified and concentrated. The severity of the attack was such that in twelve hours after the onset the disease had reached an almost fatal termination. The prostration was much greater than in her brother's case, after the second relapse and several weeks illness. For two or three days she lay in a critical condition, but afterwards recovery was rapid. There were no relapses. Very little treatment was necessary, nor, apart from those circumstances referred to, was there anything to distinguish it from the previous case. No other cases have occurred in the vicinity.

COLLEGE OF PHYSICIANS AND SURGEONS, ONT.—At the Matriculation Examination held last month, in the Toronto High School, the following candidates passed a satisfactory examination : — D. M. Fisher, Richard Stephen, E. Kitchen, Andrew McDiarmid, A. H. Miller, George A. Langstaff, George A. Kennedy, A. D. Campbell, Charles Phillips, James Campbell, W. C. Freeman, Jonathan Day, G. S. Ryerson.

COLLEGE OF PHYSICIANS AND SURGEONS, ONT.

PROFESSIONAL EXAMINATION, 1873.

(Reported for the "*Lancet*" by C. East, M.B.)

MEDICINE AND MED. PATHOLOGY—DR. WRIGHT.

1. Define dropsy ; give the causes producing it and principles of treatment.
2. Give symptoms, pathology and treatment of scarlet fever in the anginose form.
3. What pathological conditions produce colic ? give the varieties of the disease, their diagnosis, prognosis and treatment.
4. What are the characteristic features of delirium ? In what diseases apart from mania does it occur ? What are the pathological conditions giving rise to it, and how are these distinguished and treated ?
5. What are the phenomena of psuedo-membranous croup, its morbid anatomy and treatment ?

MEDICAL DIAGNOSIS—DR. STRANGE.

1. What are the symptoms of epilepsy, and how would you distinguish the actual from the feigned disease ?
2. Describe the points of resemblance between chronic bronchitis and phthisis ; also means by which you would diagnose one from the other.
3. What affections are liable to be mistaken for the hæmoptysis of phthisis, and how would you distinguish between them ?
4. Give the symptoms of pericarditis.
5. Give the symptoms of cerebro-spinal fever.
6. Give the symptoms of inflammatory croup, acute laryngitis and diphtheria, pointing out the distinguishing characters of each.

MATERIA MEDICA—DR. FULTON.

1. Name the natural order of plants to which colocynth belongs, and give the composition of its principal officinal preparations.
2. What are the contra-indications to the use of opium ? Give the principal alkaloids obtained from it ; their doses and modes of administration.
3. Give the formula, mode of preparation, use, and ordinary dose of each of the following : chloroform, iodide of potassium, acetate of lead and strychnine.
4. Under what circumstances would you prefer a direct to an indirect emetic ? State your reasons for that preference.

SURGERY—DR. CANNIFF.

1. Mention the several products of inflammation. What are the characteristics of pus; its constituents; how is it formed and what are the various changes it may undergo in the process of elimination?
2. Give a classification of wounds, and state how you would recognize a bullet wound. What are the general indications in the treatment of gunshot wounds, and what are the complications which may arise, and which should be guarded against?
3. What are the various surgical diseases which may affect the bones, and what is the difference between caries and necrosis? What are the causes of each disease and their proper treatment?
4. Point out the difference between concussion and compression of the brain; the diagnostic symptoms of each affection, with their appropriate treatment.
5. State the peculiar dangers attending penetrating wounds of the chest; how you would know whether the pleural cavity had been opened, or the lungs wounded, and proper treatment in each kind of chest wound.
6. Give cause, symptoms, pathology and different modes of treatment of popliteal aneurism.

PHYSIOLOGY—DR. LIZARS.

1. What are the functions of the foramen ovale in the foetus, and the results of its non-closure after birth?
2. What is the use of the cerebro-spinal fluid?
3. Describe the different kinds of muscle and their nervous supply.

THEORETICAL AND PRACTICAL CHEMISTRY—DR. SANGSTER.

1. Explain the meaning of the terms "latent heat," "specific heat," and the "mechanical equivalent of heat."
 2. Describe the different compounds of S. with O., H. and C., giving name, formula, molecular weight, preparation and properties of each.
 3. Describe the compounds of As. with O., H. and S., as in 2nd.
 4. Give the formula and molecular weight, and briefly describe the preparation of the following, viz:—bromine, calomel, Scheele's green, vermilion, acetic, oxalic and carbolic-acids.
 5. Give the formula of the sucroses, glucoses and amyloses. Describe the preparation and composition of dextrine and gun-cotton.
 6. Give a brief synopsis of the chemistry of milk.
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1. Describe the purification of the re-agents required in testing for arsenic.
 2. How would you determine the presence in urine, of bile, albumen, fat, or chyle?

3. A metallic solution is not precipitated by HCl. or H_2S . in excess, but after the addition of NH_4Cl . and neutralization by NH_3 , a precipitate is found by addition of $(NH_4)_2S$; what metals may be present, and what in each case would be the color of the precipitate?
4. How would you determine the presence of oxalic acid in an organic mixture?
5. How would you examine a urinary calculus to determine its composition?

MIDWIFERY—DR. FIELDING.

1. What changes take place in the uterus during pregnancy?
2. Describe puerperal peritonitis; give its causes, symptoms and treatment.
3. How would you diagnose accidental from unavoidable hæmorrhage, and what treatment is recommended in cases of the latter?
4. Mention the several disorders of menstruation. Give the different varieties of amenorrhœa and treatment to be adopted.
5. Describe the necessary steps to be taken to effect delivery in cases of arm presentation.
6. When are forceps necessary, and under what precautions?

DESCRIPTIVE AND SURGICAL ANATOMY—DR. SULLIVAN.

1. How would you remove the spinal cord for examination? At what vertebra does it begin, and where does it end? How is it retained in position? Describe the roots of the nerves; their difference and place of union.
 2. Give the course of the large intestine, the relations of the rectum, and name the vessels and nerves supplying the latter.
 3. Trace the superior longitudinal and lateral sinuses from the commencement to the point of termination, naming the bones grooved by them.
 4. Describe the formation and course of the superior vena cava and greater azygos veins.
 5. In the dissection of the neck, where do you see the first branches of the cervical plexus? What nerves form it? Trace the longest branch, giving course and termination.
 6. How would you expose the internal oblique? also the muscles passing round the external malleolus? Give their attachments.
 7. Where does the radial artery pass into the hand? Give its course thence to its termination, and name the two largest branches given off in the hand.
 8. What parts pass through the parotid gland? Give the general distribution of those parts.
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1. What muscles cause the deformity in fracture of the cervix femoris within the capsule?

2. What parts would you divide in cutting down upon the subclavian artery in the third part of its course?
3. Give the relations of the thyroid gland; name the blood vessels supplying it.
4. What parts are divided in re-section of the shoulder joint? What vessels and nerve are in close proximity to it?
5. Beginning externally, name the parts passing beneath Poupart's ligament, and the posterior annular ligament of the wrist.

MEDICAL JURISPRUDENCE—DR. CAMPBELL.

1. State the conditions under which alone dying declarations are admissible as evidence.
2. Wherein do the medical and medico-legal definitions of a wound differ?
3. Give the probable characteristics of suicidal, accidental and homicidal gunshot wounds.
4. By what circumstances would you judge that drowning was the result of suicide, accident or homicide?
5. Describe the post-mortem appearances usual in death by lightning.
6. What medico-legal inferences may be drawn from corpora lutea, and their different appearances?
7. Define infanticide, and state the best means of establishing that crime was committed.
8. Describe the varieties of insanity.
9. Under what circumstances are physicians liable to actions for damages in signing certificates of insanity?
10. How far does suicide render void a policy of life insurance?

TOXICOLOGY—DR. TUCK.

1. Name the principal narcotic poisons. Describe the symptoms produced by them and give treatment to be adopted.
2. Contrast the symptoms produced by narcotic poisons with those of natural disease.
3. Describe the symptoms and treatment of poisoning by corrosive sublimate and oxalic acid.
4. Describe the mode of detecting, in organized tissues, the presence of arsenic or corrosive sublimate.

SURGICAL PATHOLOGY—DR. FIELD.

1. Describe the destructive process in the solution of ulcerating parts.
2. Describe the two modes of development of fibro-cellular tissue for the repair of wounds.
3. Give the distinction of specific from common diseases.
4. Explain symmetrical diseases. In reference to the formative process, what is proved by the phenomena of symmetrical diseases?
5. Describe the reparative process in the union of fractures.

BOTANY—DR. MORRISON.

1. Describe the elementary vegetable cell.
2. Give two definitions of a flower, one as regards its structure, the other as regards its function, and describe fully the structure and function of the anther, pollen and stigma.
3. What organs or parts of a plant afford characteristics of the greatest importance? State the difference between a natural and artificial system in botany.
4. What is transpiration? How determined?
5. Describe the reproductive organs in mosses and ferns.
6. What are the histological characters and mode of production of cork, starch and vegetable ivory?
7. Explain the nature of carbonic acid and ammonia to the nutrition of plants, and describe the effects of growing plants on the atmosphere.
8. To what order does each of the following plants belong :—*aquilegia canadensis*, *cypripedium pubescens*, *aconitum napellus*, *arnica montanum* and *veratrum viride*?

SANITARY SCIENCE—DR. MUIR.

1. What hurtful substances suspended in an impure supply of water are most likely to lead to outbreaks of diarrhoea and typhoid fever, and what on examination are the principal evidences of the presence of such injurious matters?
2. To what cause has the presence of goitre in certain localities been attributed?
3. Describe the extent to which the quality of air is likely to be affected by the decomposition of bodies, where inter-mural interments obtain, and state briefly the evils to which a crowded population in the immediate vicinity of a cemetery may be liable.
4. What are regarded as the causes of hospital erysipelas, and what course should be adopted to limit its transmission?
5. Mention the various methods of removing sewage; indicate the best and state the influence the construction of sewers has had upon the death-rate of towns.
6. State the action of water on the lead pipes commonly used in cities for conveying supply to householders. Also the amount of lead in solution deemed innocuous; the amount also which may be considered dangerous, and specify the best means of protecting the conveyance so as to insure the safety of consumers.
8. What prophylactic measures should be enjoined in anticipation of cholera, and when the disease does occur what steps might be taken to lessen its spread?

RESULT OF THE EXAMINATION.—Forty-three candidates presented themselves for examination, of these thirty-seven passed suc-

cessfully and six were rejected in whole or in part. The following are the names of the successful candidates :—

Primary.—H. N. Beemer, N. Brewster, W. Brock, A. J. Campbell, K. H. Cameron, C. East, D. Fraser, D. B. Fraser, J. Golden, S. D. Hagle, W. T. Harris, L. D. Healy, L. J. Lennox, W. H. Lowry, C. S. Moore, N. W. Meldrum, A. McLaren, P. McLean, J. L. McDiarmid, G. Smith, and G. Shaw.

Final.—D. O. Alguire, M. I. Beeman, N. Brewster, O. C. Edwards, S. A. Ellison, C. East, E. A. Gaviller, J. Golden, S. D. Hagle, A. J. Johnson, F. W. Jackson, E. G. Kittson, H. Lang, H. T. Machell, C. S. Murray, N. W. Meldrum, A. Nichol, C. A. Pater-son, J. A. Stevenson, A. H. Wright and R. C. Young.

Of those candidates who presented themselves for primary only, the following passed without requiring an oral examination :—W. Brock, C. East, D. B. Fraser, D. Fraser, W. H. Lowry, L. J. Lennox, N. W. Meldrum, P. McLean, and G. Smith. For both primary and final—S. D. Hagle. For final only—M. I. Beeman.

Correspondence.

MALIGNANT DISEASE OF THE ORBIT.

(To the Editor of the LANCET.)

SIR,—In the LANCET for April, Dr. Garner, of Lucknow, reports two cases of malignant disease of the orbit, for which he deserves the thanks of the profession. These cases terminated fatally from a recurrence of the disease, the one in about two months and the other in about five months after the eye-ball, and all that could be seen of the morbid growth, had been removed. From the fact that the disease returned in these cases, although, after the operation, no remains of the morbid growth could be seen—even with an ordinary pocket lens—Dr. Garner seems to infer that the origin of the disease is not in the orbit. Whether, in these cases, the disease had its origin in the orbit or elsewhere, is more than any one, from the report, could undertake to say.

I, however, respectfully submit (without entering into the etiology of cancer) that the recurrence of the disease in Dr. Garner's

cases may be due to the fact that, although after the operation no trace of the disease was recognized, if the tissues still remaining had been examined with the microscope, they would have been found to be infiltrated with cancer cells.

It has been proved, again and again, that if the apparently healthy tissue adjacent to a cancerous breast be examined with the microscope, it will be found to be already infiltrated; and in malignant disease within the eye-ball, where the sclerotic appears to be entire, the loose areolar tissue outside and adjacent to the sclerotic has been found, with the microscope, also to be infiltrated. Hence the maxim is now enjoined, that whenever we excise infecting tumors, to remove a zone of healthy tissue also.

In removing cancerous tumors of the trunk, this zone of healthy tissue can be removed with the knife; but in the orbit this is impossible. The best method, unquestionably, in removing morbid growths from the orbit, is that first introduced into the Middlesex Hospital, and now adopted by the surgeons of the Royal London Ophthalmic Hospital, viz., *a combination of excision and escharotics*.

The entire contents of the orbit are removed as perfectly as possible; if necessary, following the diseased growth into the antrum, frontal sinus, nasal cavity or ethmoid cells. If the walls of the cavity are involved, the peri-orbita or bone is detached with an elevator or raspitory. Hæmorrhage is arrested with a hot iron; the cautery also destroying morbid tissue inaccessible to the knife or scissors. In most cases, I think it advisable to remove the eyelids also, or at least the palpebral conjunctiva, and tarsal cartilages. Bleeding having ceased, the operation is completed by applying to the wound an escharotic of chloride of zinc paste, spread upon lint. This paste is composed of one part by weight of chloride of zinc, four parts of wheat flour and tinct. opii sufficient to make a paste of the consistence of honey. Its action is superficial, or deep, according to the thickness of the layer of the paste. The eschar is hard and dry, and, by the time it is completely detached, cicatrization is found to be nearly complete.

If considered desirable, the entire bony wall of the orbit may be destroyed. This sometimes comes away entire, a specimen of which is now in the museum of the Middlesex Hospital; the patient, at the time the case was reported (November, 1868), was doing well—then nearly three years after the operation. Several very

interesting cases are reported in the Ophthalmic Reports, vol. v. 3, 4, as well as in the last edition of J. Sælberg Wells' "Treatise on Diseases of the Eye." Of course it is not claimed for this combination of excision and escharotics, that it will necessarily prevent a recurrence of the disease. It is simply claimed that this operation offers a better prospect of immunity from recurrence than that of any other known procedure; or, in the language of Mr. J. W. Hulke, "it is the practical observance of that principle on which every operation should rest, viz., that *it is thorough* for the particular end in view."

RAPID RECOVERY AFTER AMPUTATION OF THE THIGH, UNDER THE MOST UNFAVORABLE CIRCUMSTANCES.

(To the Editor of the LANCET.)

SIR,—I enclose you the following brief report of a case of amputation, which, if you think worthy of inserting in the LANCET, I will thank you to do so.

R. M., æt. 67, has been afflicted with necrosis of the tibia, with an unreduced dislocation of the patella, ever since he was ten years of age. The tibia and the bones of the foot were extensively involved. The whole length of the anterior part of the shaft of the tibia was destroyed, and there was no evidence of any effort at reproduction of bone. The shaft was so weakened that it was unable to support the weight of the body, but would bend when the slightest weight was brought to bear upon it. There were several sinuous openings, which discharged a large quantity of unhealthy and offensive pus, and his sufferings were very great. The limb was utterly useless. He also labored under disease of the heart, and the urine contained a large quantity of albumen.

Under these most unfavorable circumstances, I hesitated to operate; but the patient was so determined to have the limb removed, and being willing to take all the risk of the operation and placing himself unreservedly in my hands, I had no alternative. I amputated the femur in the lower third, under chloroform, assisted by Drs. Smith and Oakes, of Digby, and in *four weeks'* time he was quite well and able to attend to his ordinary affairs. The principal treat-

ment consisted of carbolized oil and oakum locally, tonics and full diet. This case is remarkable, chiefly from the rapidity with which the healing process was brought about in a constitution so long weighed down with disease, and as showing that, even under the most unfavorable circumstances, much may be done by assisting nature.

Yours very truly,

H. D. RUGGLES, M.D.

Weymouth, N. S.

(To the Editor of the LANCET.)

SIR,—In the April number of the LANCET I saw a communication over the signature of P. V. Dorland, in reference to the controversy between his partner (Dr. Clapham) and myself. It would seem by this that Dr. Clapham is on the retreat, and the fortunes of the day are to be retrieved by his partner. Well we confess we feel a little shaky on being compelled in self-defence to enter the arena against this medical Goliath and renowned champion of the quill. He has acquired wonderful popularity since the Railroad accident near Shannonville last June, on account of his discovery of the peculiar virtues of cayenne pepper and its successful administration, in the treatment of severe burns and scalds. This discovery of itself is quite sufficient to immortalize his name, and give him the vantage ground over "the common practitioner and mere routinest." We think however it was the great Samuel Thompson of Gatesburg, N. Y., who first brought this article most prominently before the public; but its crowning virtues were left to be discovered by our worthy friend, and which at once places him in the front rank of the profession. * * * Nevertheless great men are not without their faults, and my learned friend is not an exception to the general rule. With all his greatness, he lacks a certain amount of magnanimity, but the want of this generous faculty is more than counterbalanced by his excessive modesty. Indeed some of the greatest operations that he has performed in an important branch of the profession have never been allowed to see the light or be made public, by reason of that exquisite urbanity, retiring disposition, and great modesty which characterizes the actions of distinguished physicians and surgeons; and it is to us a matter of wonder that a gentleman of his known

veracity should (inadvertently no doubt) commit so serious an error in reference to facts in his communication. I never mentioned *private diseases of females* in my card—simply “diseases of women and children,”—on the same principle that he in his card states *chronic diseases a specialty*. It certainly appears improbable, that I should be jealous of either him or his partner, as his statement alleges. It is scarcely possible that I could have entertained a shadow of hope of ever being a successful rival to men of such transcendent abilities—abilities which place them so far beyond the range of common practitioners that jealousy could have no part in producing a controversy like this. I was not aware that I had written anything that could justify a personal attack. He accuses me, as if it were a crime, of being an Englishman of Welsh extraction—a member of the Irish P. Benevolent Society, Orange, Odd Fellows, Freemasons, &c. Well, what of it? These Societies are time honoured, useful and honorable. In conclusion I have only to say that if he sees fit to deal unfairly in personalities, I have no objection, but shall feel constrained as I see the necessity under the circumstances to “carry the war into Africa.”

Yours respectfully,

R. TRACY.

Belleville, April 24th, 1873.

[This controversy, in the columns of the LANCET, must drop here.]—Ed.

(To the Editor of the LANCET.)

SIR,—I beg to explain how my name came to be attached to a certain “Testimonial” given to Mr. John Granger, and published in the February number of your journal. About seven or eight years ago, Mr. Granger called on me, saying that he was about moving to the West (as I thought, to the Western States), and asked me to sign a “Testimonial,” to which the names of several medical gentlemen in this neighborhood were already appended. Having known Mr. Granger for several years, and believing him to be a respectable man and very capable of making himself useful as a sick nurse, I, without consideration, signed the “Testimonial.” I regret the circumstance, as I have never knowingly given countenance to quackery. At the same time I am sorry that Mr. Granger has not had better

educational advantages and medical training, as there can be no doubt but he has a natural aptitude for the practice of our profession.

Yours respectfully,

R. J. GUNN.

Whitby, March 26th, 1873.

(To the Editor of the LANCET.)

SIR,—Will you kindly allow me, through the medium of the LANCET, the privilege of intimating to such as have not received the “Cancer Ointment,” respecting which I wrote an article, published in the February edition ; that in consequence of the demand being so unexpectedly large, my stock was soon exhausted. I am now preparing a fresh supply, which will be distributed within a week or two. I am happy to say that the success attending the administration of this remedy, in the hands of others, has been marked ; and it would afford me much gratification if the gentlemen, from whom I received the reports of its success, would publish the notes of each case.

Yours faithfully,

J. H. BURLAND.

Hatley, April 16th, 1873.

Selected Articles.

TREATMENT OF PSORIASIS.

Dr. Montmeja (*L'Abeille Méd.*, 27 Jan., 1873) remarks that psoriasis is, after eczema, the most commonly met with among the so-called *Dartres*. The school which preceded that of our actual masters had classed this among the squamous diseases. In spite of this difference in classification, the treatment of both schools is almost identical. This disease is not severe in itself, but tenacious, obstinate, and those attacked by it, even in a slight degree, are terribly liable to relapses. Frequently hereditary, the disease shows itself first of all in adult life, after which it may be intermittent in its attacks or be inveterate. We must not then, in the actual state of our knowledge of therapeutics, delude ourselves about the cure of psoriasis ; we whiten the patients, or we may hasten the evolution of an outbreak, but it is quite impossible to ward off relapses.

The treatment of this disease is based on two methods, local and general. The general treatment recognized by the predecessors of the modern school would prove that they had recognised a certain air of family resemblance to other skin diseases. The general treatment consists in mild purges frequently repeated and arsenical preparations, or cantharides or sulphur, or infusion of senna. As to the administration of arsenic, Professor Hardy prefers the following: Distilled water, 300 grammes; arsenate of soda, 5 to 10 centigrammes; of which mixture a tablespoonful a day is at first prescribed, and then two in a short time.

We have seen the tincture of cantharides employed with some success in the dose of two drops from the commencement in a wine-glassful of sugar water, augmenting this dose by a drop each day, until thirty drops are reached. This medication requires extreme vigilance, because of the danger which may result from its prolonged use.

There are other medicines which seem to act curatively in psoriasis by provoking an artificial eruption of the skin: of this number is copaiba, the excellent effects of which have been noticed by M. Hardy, who was treating himself for gonorrhœa whilst affected with psoriasis. Encouraged by this fortuitous result, Hardy administered copaiba in large doses to patients without gonorrhœa: the action of the remedy on the disease was seen to be incontestable.

To these treatments we may add sulphur baths. The most useful local treatment without doubt consists in vapour baths, either alkaline or sulphur, and in the application of empyreumatic oils upon the eruptions. It is rare to find sulphur ointment of use in such eruptions, as also is the case with mercurial ointments, which, although favourable at the height of the eruption, are absorbed after the squames fall and cause salivation.

Writers on skin diseases give the preference to tar ointment or oil of cade ointment; tar and oil of cade are prescribed mixed with lard in the proportion of one-fourth. We may, according to the toleration of the skin, diminish this proportion, or, again, employ the tar or juniper oil pure, when there is perfect tolerance.—*The Doctor.*

SUCCESSFUL CASE OF TRANSFUSION.

UNDER THE CARE OF F. E. CAREY, ESQ., M.D., GUERNSEY.

On the 28th of January, 1872, Mrs. V. was seized with the early pains of labor, which continued during the remainder of the day. On the morning of the 29th, the head entered the cavity of the pelvis, though the pains were so slight that they could scarcely

be said to manifest the characteristics of the second stage. Even these however ceased, and the progress became absolutely nil. The patient being irritable and much exhausted, in the afternoon an opiate was given, but no sleep followed, and at 10 p.m. the head occupied the same position it had done fifteen hours previously.

The patient was a primipara of an indolent disposition, and tending to obesity. About two months previously she had suffered from an attack of pleuro-pneumonia on the right side, and a fortnight later from a similar attack on the left side. Her sister states that since that date she has been unusually drowsy, dosing at all times when not actively employed. There has been no swelling of the feet. This drowsiness has not been so marked within the last few days as previously. The urine was not examined.

At 10 p.m. the head occupied the right oblique diameter of the pelvic cavity, but no fontanelle could be felt. A large caput succedaneum had formed, and the lower part of the vagina and labia were oedematous. An attempt to deliver with forceps having failed, delivery was accomplished with difficulty by version at 12.5 a.m. on the 30th. The child was still-born, but was resuscitated by insufflation. The uterus at first contracted, but soon relaxed, and a quantity of air was sucked into the cavity. Hæmorrhage came on with increasing intensity, in spite of all efforts to control it. Pressure on the abdominal aorta at last partly succeeded, but the patient had fallen into a state of syncope, and moist râles were audible all over the chest, even at a distance from the bed. Under these circumstances transfusion was performed.

An ordinary glass male syringe, holding about an ounce and a-half, was procured, and a friend having been found willing to give the necessary blood, the operation was commenced. The blood was drawn into a warmed wine-glass, taken up in the syringe, and steadily injected into one of the veins at the bend of the elbow, which had been opened for the purpose. This was four times repeated, and (allowing for blood lost by clotting) about four ounces were injected. The effect was instantaneous; the patient revived, looked about her, and in a few minutes spoke. The pulse, before imperceptible, reappeared, and the râles subsided. She had 20 min. tinct. opii and brandy, and by half-past three, was so well that we left her.

Jan. 30th, 8 a.m.—Has been quiet, but has not slept. Had brandy repeatedly. Pulse 140, steady; respiration 28, variable.

9 p.m.—Pulse 124; respiration 28, steady.

31st, 11 a.m.—Pulse 128. A little excited, but feels well, and hungry.

6 p.m.—Patient suddenly seized with dyspnœa. Moist râles all over the chest; face livid; extremities cold. Pulse 134; respiration 42. To have tinct. opii min. 10, every four hours, and brandy.

Feb. 1st.—Better this morning. Pulse 128; respiration 32,

quiet. It is supposed that the death of her child yesterday afternoon may have had some connection with her seizure.

2nd.—Quiet and comfortable since last night. Bowels moved yesterday by castor-oil. Pulse 120 ; respirations 32. Wound in arm healed.

After this date, with the exception of a wild expression, which she constantly wore, and of occasionally giving way to bursts of emotion, she progressed favorably, until

Feb. 8th, when the pulse began to rise, and she showed unmistakable signs of sinking. She refused food, and became quite unreasonable. Pulse 126 ; respiration 34.

9th.—Patient rapidly sinking ; reason quite gone. Pulse 120, intermittent, feeble ; respirations uncountable. Has lost control of the sphincters.

4 p.m.—Died, eleven days after operation.

REMARKS.—Transfusion is one of those operations which we are but seldom called upon to perform in the course of obstetric practice. When however the necessity does arise, it is all the more apt to find us unprepared ; and as that necessity is always urgent, it is our duty to be aware of the most readily procurable instruments with which it can be performed. In the preceding case the operation was performed with, what I do not hesitate to call, success, with instruments found in the ordinary domestic laboratory. A common glass syringe and a wine-glass can almost always be obtained. We found the size mentioned very convenient, as containing just about the quantity which could be injected before clotting interfered seriously with its action. The blood was not drawn into the wine-glass until the moment it was required, and the glass was washed in warm water between times. A glass syringe, by its transparency, gives us the most perfect assurance that we exclude all air—a point of the most vital importance.—*Glasgow Med. Four.*

CLINIC ON RENAL DISEASE IN CALCULOUS PATIENTS, AND ITS INFLUENCE ON THE CHOICE OF OPERATION.

BY SIR HENRY THOMPSON, M.B., SURGEON TO UNIVERSITY
COLLEGE HOSPITAL, ETC.

[The following lecture is of interest to the profession, as it includes a discussion on all the points bearing on the now celebrated case of Napoleon III.]

The patient, a naval pensioner, aged 60, thin and careworn, had suffered from symptoms of stone for more than three years. In the course of 1872, he had been admitted into a metropolitan hospital,

when the stone was crushed several times. After this, the patient continued pretty comfortable for about three months; he then rapidly relapsed, and, when he came under Sir Henry Thompson's care, the old man was in a most miserable condition. He could not hold his urine more than half an hour, even at night, and, as he could only pass it when in the erect position, he was obliged to leave his bed every time, and was greatly reduced by pain and want of sleep. The urine was alkaline, of low sp. gr., contained a large amount of albumen, and an unmistakable granular cast was found under the microscope at the first examination. On sounding him, fragments of phosphatic stone were detected. It was evident that the patient had advanced disease of the kidneys, and that his ultimate fate was settled; still, his principal sufferings were due to the presence of the calculous matter in the bladder, and these could be removed or greatly relieved by lithotripsy.

He was accordingly admitted into the hospital on January 21st; on the 24th, Sir Henry removed some *debris*, and repeated the process on the 28th without any unfavourable symptoms: on the contrary, the patient during this time improved in strength, could move about better, and was able to hold his urine for an hour or more at a time. All but a few fragments had in fact been removed when, on February 1st—a cold day—the patient slipped out of the ward and stood for some time in the yard of the hospital smoking. Next day, he had a severe rigor, followed by headache, drowsiness, partial suppression of urine, etc., and, although at first he rallied somewhat under treatment, he never recovered the effects of his unfortunate indiscretion, and died on February 19th of uræmia.

Post Mortem Examination.—The external surface of the kidneys was granular; the capsules were opaque and adherent; on section, the cortical layer was thin, mottled with patches of yellow degeneration, and studded here and there with small abscesses; the pyramids were congested. The pelves of the kidneys and the ureters were dilated, and contained puriform matter. The muscular coat of the bladder was hypertrophied; the mucous membrane was much congested, dark, thickened, opaque, and ulcerated in places; the so-called "middle lobe" of the prostate was much enlarged, forming a regular bar across the neck of the bladder; in the deep hollow behind this were a few small and soft fragments of stone, weighing in all twelve grains.

In commenting on this case, Sir Henry Thompson said:—"The question we have to consider to-day, gentlemen, is this—If stone in the bladder be complicated by the presence of chronic renal disease, what should be done? When are we justified in operating? and which operation should we choose? "Chronic renal disease" is a wide term; and, in order to answer the question better, I will consider the chief forms of kidney-disease separately.

We may at once dispose of malignant disease: if this be so ad-

vanced that a satisfactory diagnosis is possible, any operation is clearly useless. Chronic Bright's disease, again, is a loose term, and includes several varieties; the two that chiefly concern us now are the large white smooth kidney, and the granular contracted kidney: the so-called amyloid disease is rare. There is no difficulty in the diagnosis of Bright's disease, even when complicated by the presence of stone; the low specific gravity of the urine, the presence of casts and of an amount of albumen out of proportion to the amount of pus present decide the nature of the case at once. Next, there is what may be called the calculous kidney. You will often meet with men who are frequently, or almost continuously, passing crystals of uric acid or small calculi. This never goes on for any length of time without damage to the kidney; on microscopic examination, you will always find blood in the urine. They are often stout red-faced, healthy-looking rustics; but if such a man come to you with a stone in his bladder, and tells you he has been accustomed to pass gravel for years, beware of him; in spite of his apparent good health, he will be unusually liable to severe rigors and urinary fever.

Next, saccharine diabetes is occasionally associated with stone. I have met with two such cases, and never had any more troublesome; there was in both very great irritability of the bladder and of the system generally; and if you should meet with the same complication, the case will probably require all the care and patience you can muster.

Lastly, there is that dilated condition of the kidney and the ureters which is due to long standing, obstruction in the passages. This has been sometimes called "surgical kidney," a most inappropriate and unphilosophical term, and one which I never use. So far from being really a "surgical" kidney, it is one which denotes the want of surgical treatment; one which never would have existed had surgical aid been afforded at the outset of the malady. This condition is most frequently met with in cases of old stricture, also in cases of enlarged prostate, large calculus, long continued atony of the bladder, etc. Owing, then, to the presence of some obstruction to the escape of urine from the bladder, that organ becomes dilated and hypertrophied, the pressure tells backwards on the ureters, these and the pelves of the kidneys become dilated, the secreting substance itself is compressed against the capsule, and, finally, the whole organ may be distended into a sort of cyst. I have seen the ureters as large as the small intestine, and contain, with the pelves of the kidneys, thirty fluid ounces of water. A calculus by itself never produces this effect unless it be large, and not necessarily even then; it depends on the amount of obstruction. And now comes an important fact, viz., that all this may occur without any distinct symptoms; you may suspect that this state of things is present, but you cannot make absolutely sure. The patient probably has some cystitis, and consequently pus in his urine, but there is no more albumen present

than the pus would account for ; there are no casts ; the urine may be of fair specific gravity, and there will even be no deficiency of urea ; if there be, the patient will at once show symptoms. The fact is, that we are liberally provided with secreting and excreting organs. A man may live very comfortably, even though a considerable proportion of both lungs be blocked up with tubercle ; two half lungs are sufficient under ordinary circumstances ; but if he get a little bronchitis—an amount which a healthy man would scarcely feel—it carries him off ; he has just enough breathing space to sustain life, but no margin to spare. Just so a man may live with two half kidneys ; he gets along quite well under ordinary circumstances ; there is just enough of the organs left to meet the wants of the system, but any small derangement upsets the balance, and serious symptoms appear at once.

A high authority abroad has stated that this state of the kidneys can be diagnosed by means of palpation, but I cannot affirm his assertion. It would be exceedingly difficult to detect with certainty a soft, movable, and collapsible tube like the ureter even in a thin person ; but generally these patients are past middle life, and stout also from confinement ; the parts are not sensitive, unless suppuration or a renal calculus be present. You may often be liable to make a shrewd guess ; but even a strong suspicion is not a sufficient ground for refusing to relieve a suffering patient.

In the next place, to what extent does the presence of renal disease affect the prognosis of lithotripsy ? Omitting slight cases, I have operated on three patients who were suffering from *advanced* chronic Bright's disease. The first was some years ago. A very pale, weak, and puffy-looking man, with a large phosphatic stone, came to me to be operated on, but I refused ; he, however, begged so hard that I would do something for him, and was in so much pain and distress, that at last I took him in. Even then I kept him three weeks under observation before I did anything, which is not my usual custom. I then crushed the stone very carefully in eight sittings, allowing a good interval between them. The man was in the hospital three months—three times as long as most of my patients—but he went out freed from his trouble, and died of the kidney disease nine months afterwards without any recurrence of the calculus.

Some time afterwards, I operated on a second and similar case. He had some rigors, but went out at the end of ten weeks cured of his stone ; he came to show himself three months afterwards, when he had still a large amount of albumen in his urine, but no recurrence of the stone. Emboldened, perhaps, by success, I attempted a third and worse case shortly afterwards. This patient went on well for a time, but after the fifth sitting uræmic symptoms supervened, and he died.

I cannot tell how many cases of mechanical dilatation of the kid-

ney I may have operated on with success ; for, as I said. I know no means of ascertaining with certainty during life the existence of the disease ; but I have little doubt that there has been more or less distension of the ureters, etc., in a considerable number of the more severe cases. I may instance particularly three cases of stone complicated by very tight and old standing stricture. My plan under such circumstances is to tie in catheters for a week, or until I can introduce a small lithotrite : after each crushing I replace the catheters, and continue them until the stone is removed. I have not the smallest doubt, judging from the history and state of these patients, that all had some, perhaps a considerable, amount of disease ; yet in each case the result was successful.

Surgeons have said that, if a patient with stone in the bladder have also chronic disease of the kidneys, the best plan is to cut him ; to have one operation and have done with it, and not to go on teasing the man with instruments for several weeks. I can only say that lithotomy would certainly have killed any one of the three pale, feeble, bloodless patients I first mentioned ; indeed no one of the six could have been cut—no surgeon would have thought of it. It is just fifty years since lithotripsy was first introduced, and up to thirty years ago, or less, this dictum was true, but it is not so now. The statistics of lithotomy were never better than they were fifty years ago ; indeed they are now scarcely as good, for since then many of the most favourable cases have been treated by crushing. The statistics of the lithotrite, on the other hand, have improved, and are improving every year. Lithotomy, then, has stood still ; lithotripsy has been greatly improved, and the axiom is consequently now reversed. There is no doubt with our present experience that, if only the stone is sufficiently friable, lithotripsy, *if skillfully performed*, is the best operation in such cases : the shock, loss of blood, etc., of lithotomy make considerable demands on the strength of the patient. The lithotripsy must, I repeat, be carefully done ; of the two operations, that of crushing is certainly the one in which previous practice on the part of the operator makes the greater difference in the chance of curing the patient. Therefore, I say to you, inasmuch as you may be well able to do a good bold operation of lithotomy at the outset of your career if you have surgical talent at all, do so with any doubtful case, or if the stone be at all large, until you have had a little experience with two or three cases of small stones by lithotripsy. Whatever you do by that means, let your early attempts be always made on small calculi only.

In conclusion, I may repeat the advice which I am constantly giving you. Always find the stone, if possible, when small ; the symptoms produced by a stone, say of the size of a nut, are clear enough. There is no question, then, about the advisability of cutting or crushing, or about the presence or absence of kidney-disease ; crush the stone at once, and the cure of the patient is almost certain.—*British Med. Journal*, March 8, 1873.

PUNCTURING CLOSED CAVITIES—BLADDER—HERNIAL SACS—ABSCESES, &c.

Dr. H. R. Clark mentions, in the *Med. Record*, a case of retention of urine from enlarged prostate. On failing to pass a catheter into the bladder, he resorted to puncturing that organ above the pubis, with a trocar and canula of the size of *one-twelfth* of an inch. Several punctures were made, and the canula was withdrawn as soon as the bladder was emptied. Soon after this the parts relaxed and permitted the passage of a catheter with ease.

Dr. J. L. Little, in the *New York Med. Journal*, records a similar case, where he punctured the bladder in the same region with an aspirator, 64 times. Both cases did well. I remember, in my young days, of seeing an old country doctor puncture the bladder of an old man, with a small trocar, for retention. This case did well too. Puncturing the knuckle of intestine in irreducible strangulated hernia, is now becoming a very frequent operation, resulting in the most desirable manner. Several cases have been reported of late, wherein strangulated hernias were reduced after puncture of the strangulated knuckle of the gut, by M. Demarquay, of Paris, and D. Chauveau, of Courtelain, and several others. A few years ago, six cases were reported of reduction of the strangulated gut, by the introduction of the canula of a large hypodermic syringe into the cavity of the strangulated knuckle, and the barrel, with the piston pushed down, was then attached to the canula, when the piston was gently withdrawn, and in this way the fluid and gaseous contents of the strangulated knuckle were removed, and the hernia afterwards yielded to gentle pressure. All these six cases, so far as my recollection goes, were successful. I have two others so treated, and with the desired results. It is evident that the great advantage offered by the hypodermic syringe, as well as the aspirator, in the successful treatment of hernia, by drawing off the fluid and gaseous contents of the strangulated gut, and thus facilitating its reduction, should give it preference in all cases when the usual means have failed to reduce the strangulated gut, and before the hazards of an operation are entered upon. I have been told by two old country practitioners, that each of them had succeeded in reducing a case of strangulated hernia by puncturing the knuckle with a small trocar and canula. One of them used a rather ingenious contrivance to effect his object. The rim or flange of the canula was cut off, and after it was passed into the gut, a small rubber bulb, lightly wrapped with a string, so as to express the air, was slipped over the canula, and the string removed, so as to allow the bulb to expand, and exhaust the cavity of the gut of its contents. Both of the cases were successful. In the country any of these contrivances are handy, and might, with happy facility, be put to good use in cases of this kind. The mor-

talities of hernia operations with the knife are of sufficient enormity to justify the means herein suggested, in the absence of a regular aspirator, before resorting to the operation of herniotomy.

Whenever there is any dangerous collection of fluid, these means may be resorted to for its removal without the incurring of any great risk. In urgent cases of collection of fluid in large quantity in the sac of the pericardium, I should not hesitate to puncture the sac with an aspirator, or, in its absence, with a small trocar and canula of the size used by Dr. Clark (one-twelfth of an inch), rather than risk the probable destruction of the patient by the pressure of the accumulated fluid on the heart. If the canula has its upper end free, so that an exhausted rubber bulb can be attached, a trocar of this size can be put to a multitude of good uses in emergencies.

In every instance, after resort to puncturings, a full dose of morphia should be given, and the effect kept up by small ones of $\frac{1}{2}$ gr., repeated frequently. This should never be neglected on any occasion. I have repeatedly evacuated carbuncles, and large abscesses, with the hypodermic syringe. In fact, during the last twelve years, I have always used this instrument to remove the pus from all localities that the canula could reach. After the pus is removed in this way, I paint the swollen parts with collodion, to which morphia or atropia is added. To each ounce of collodion five or six drops of castor-oil is added. This gives the film toughness. By this method pus can be removed without causing pain, which is certainly a matter of considerable moment to the humane physician, as well as his patient.—*Med. Archives.*

COLD BATH IN ACUTE RHEUMATISM.

From time to time various medical journals have contained reports of the good effects of the application of cold in rheumatic hyperpyrexia. In the July number of the *Practitioner*, Dr. Charles Kelly, Asst. Physician to King's Coll. Hospital, reports two cases of considerable interest. In his own words: "Both suffered from their first attack of rheumatic fever; both had similar symptoms, and in both the pericardium was inflamed. The man seemed to be going on very well for a time, but then his temperature went up and he died; the woman, who was equally ill, and in whom the temperature was still higher, was cooled down more than six and a-half degrees in four and a-half hours, and made an excellent recovery." In the case of the woman, the simple addition to the treatment, of cold applications seems to have turned the scale and saved her life. Prof. C. Leibermeister, of Tübingen, in his lectures on the treatment of fevers, speaking of the use of the cold bath, says: "But this method is not only useful in abdominal typhus, but in every febrile

ailment in which the temperature by its height and duration brings danger. The number of diseases is much larger than was formerly supposed. In those diseases in which exist severe and dangerous local alterations, is gained a great deal when we succeed to conquer the danger solely dependent upon the fever." In the January number of *Braithwaite* for 1873, Dr. Henry Thompson, physician to the Middlesex Hospital, reports the successful treatment with baths of a case of acute rheumatism with head symptoms. He mentions, incidentally, that the patient had severe and extensive complications—including pneumonia, pleurisy, bronchitis, and pericarditis—which underwent no perceptible change for the worse in consequence of the treatment adopted. Dr. Thompson considers that in these cases a high temperature is the index of some profound and damaging impression upon the nervous system. With regard to the value of cold applications in the treatment of this disease, he says: "There be many factors at work all conspiring together to compass the death of the patient. If the aggregate of these factors be overwhelmingly strong, there is an end of the matter and the patient dies; but let the powers of life and death be more evenly adjusted, then the removal of any single factor (say the temperature) turns the scale in favor of life, or, to use a more homely metaphor, takes off the last ounce that is breaking the camel's back. It behooves us, therefore, practically to accept the dogma that it is the heat which is the main destructive element, and to act upon it at the bedside whether we believe it or not. We can control temperature, and we are bound to control it." He considers a temperature of 105° or over to call for a prompt use of the bath, and uses it even at a lower temperature to palliate delirium and restlessness. The perusal of these reports leads me to contribute some notes of a case which came under my treatment last summer.

M., 41, native U. S., teamster in government employ Admitted to hospital August 24, 1872. Had a slight attack of rheumatism five years ago. Is a hearty, well-nourished man; drinks some. August 21, was taken with severe pain in right knee and ankle, and had some fever. Has continued to get worse, and applied for treatment this morning. His right ankle and knee and both wrists are swollen, red, and painful. Tongue moist, furred. Skin perspiring freely. Bowels constipated. Pulse 98, full; temperature at 7 a.m., 101° . Heart sounds normal. No pain in chest. R Sodæ et pot. tart. $\bar{3}$ i.; Antim. et pot. tart. grs. ij. Mix in water and take at one dose. The affected joints to be wrapped in flannel and oiled silk, and kept wet with Fuller's sol. of bicarb. potass. and opium. Diet, beef-tea and milk. Bowels were freely moved. August 27.—Pain has left the ankle during the night; is worst now in the shoulders. Suffered severely last night, but was relieved by 10 grs. Dover's powd., and obtained some sleep. Urine high colored; no albumen. Takes food well. Temperature in evening, $103\frac{1}{2}^{\circ}$; resp., 30. Sept.

1.—Passed a restless night. Has pain in testicles; they are tender and swollen. Says he has a dull pain over region of heart. Resp., 42; temperature 103° . At 7 a.m., area of heart's dulness slightly enlarged. On auscultation a to and fro sound is heard. Two wet cups applied over region of heart, which gave some relief. Sudamina, chiefly over chest. He is very feeble and depressed. Quinia, grs. 5 every four hours, 18 grs. Dover's powd. at night. Six oz. brandy a day. Sept. 5th.—Patient continues much prostrated; delirious for 24 hours. The area of the heart's dulness extends above to second intercostal space, and laterally from near the right edge of sternum to beyond left nipple. No friction sound. The temperature is $104\frac{3}{4}^{\circ}$ at 7 a.m.; resp., 44. At 9 a.m. he was placed in a bath at the temperature of 54° , and kept in it 40 minutes, when the temperature was lowered to 101° . While in the bath he complained of cold. In the afternoon the temperature began to rise, and the bath was again used for 24 minutes, when the temperature fell to 100° . The patient then went to sleep. Sept. 6.—The patient feels easier. Temperature, 100° ; resp., 37. Sept. 9.—Is stronger, and takes more nourishment. Sept. 14.—Area of heart's dulness diminishing; continues to improve. Sept. 20.—He is convalescing.—*Dr. Boone in Med. Record, N. Y.*

GONORRHOEA, GLEET, &c.—We have recently known a number of very obstinate cases of gleet relieved by the introduction of a catheter, smeared with mild zinc ointment, once or twice per day. Many recent cases of gonorrhœa are much relieved by the same means, with the addition of a little carbolic acid, sulphate of zinc or nitrate of silver. An injection, containing about 2 grs. of sulphate of zinc to the ounce of water, and the whole made thick as cream with finely-powdered goldenseal (*Hydrastis Canadensis*), is deemed worth from \$500 to \$1000 by those who have been very speedily cured by it. At least, such is their verbal estimate of its value. It is thrown into the urethra, and allowed to remain as long as it will.—*Med. Times.*

APPOINTMENT OF CORONERS.—Herbert Renwick, of the Village of Orono, Esquire, M.D., to be an Associate Coroner within and for the United Counties of Northumberland and Durham. Nelson Mulloy, of the Village of Preston, Esquire, M.D., to be an Associate Coroner within and for the County of Waterloo. James Fielding, of the Village of Orono, Esquire, M.D., to be an Associate Coroner within and for the United Counties of Northumberland and Durham.

The Canada Lancet,

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TORONTO, MAY 1, 1873.

AMERICAN ASSOCIATION FOR THE CURE OF INEBRIATES.

We have been favored with a copy of the proceedings of the third meeting of the American Association for the Cure of Inebriates, which took place in the city of New York, on the 8th of October, 1872, Dr. Farrish, president, in the chair. Among those present were Dr. Willard Parker, president of the New York State Inebriate Asylum; Otis Clapp, president of the Washington Home, Boston; Samuel P. Godwin, president of the Franklin Reformatory for Inebriates, Philadelphia, etc., etc. The opening address was delivered by the president, Dr. Farrish, in the course of which he said he believed they were a unit on the proposition that intemperance was a *disease*, and one of a most grave and fearful character; and that in making that statement, they were confronted by sincere and honest reformers in the world of religion and morals, who *do not* believe that intemperance is a disease, and who have used the religious and total abstinence press of the country to antagonize our position.

People necessarily have a very superficial and false notion of what disease is. They are apt to overlook visible signs, and seek for evidences of disorder in the occult forces of the human body. If intemperance is not a disease, how comes it that so many tens of

thousands of people die from it every year? Intemperance may, however, be in its incipency only a habit; but when there is an undue craving, such as to overpower the judgment and will, it then assumes a different character, and is a subject for treatment; not merely medical treatment, but the regulation and discipline, which every well-regulated inebriate asylum affords.

Several very satisfactory reports were received and adopted, and some very instructive essays were read and ordered to be published as part of the proceedings of their meeting. At their last meeting, a year ago, a communication was received from Dr. Dalrymple, M.P., England, chairman of a Select Committee of the House of Commons, appointed "to consider the best plan for the control and management of habitual drunkards," requesting the American Association to appoint a delegation of two members, to go to England and give their evidence before the Committee. In response to that request, the Association appointed Drs. Farrish and Dodge. The report of their mission, which is of a very interesting character, was laid before the Association, setting forth the opinions of the British practitioners, as well as those of the American delegation, given in evidence before the Select Committee of the House of Commons on this important subject. The investigations of this Committee commenced on the 29th of February, and their final report was adopted on the 10th of June.

The testimony of both British and American witnesses was unanimous that inebriation should be considered and treated as a disease, and it also showed the imperative necessity for legislation on behalf of a class of persons for whose relief there is no hospital but the common jail or the lunatic asylum, and a class that is daily increasing in numbers.

The medical evidence also went to show that mania for drink often proceeds from cerebral disease; but that whilst this may, in some instances, be the cause of habitual drunkenness, it is usually the effect, rather than the cause. In the Wakefield Asylum, England, out of 500 cases of lunacy, no fewer than 79, or fifteen per cent., were directly due to drunkenness, besides a large number indirectly due to the same cause. The same might be said of the asylum in Lancashire, and many others.

The Committee recommended that reformatories should be provided for those who are so given over to habits of intemperance

as to render them unable to control themselves, and incapable of managing their affairs ; and that these reformatories should be divided into two classes, one for those who are able to pay for the cost of residence, etc., and another for those who are unable to contribute. The former might be profitably conducted by private enterprise ; while the latter must be supported in whole or in part, either by the government or the local authorities, or both. Patients may be admitted into either of these institutions at their own request or by committal.

From the reports of the various inebriate institutions in England and America, laid before the Committee, it was shown that these reformatories are producing considerable good in effecting amendment and cures in those who have been treated in them. The average number of cures was stated to be from 33 to 40 per cent. of the admissions, and the average time occupied in effecting these cures was stated to be from 12 to 16 weeks. The cures are also reported to be as complete and permanent as in any other form of disease, mental or physical.

The Annual Report of the New York State Inebriate Asylum for the year ending October 1st, 1872, gives a very favorable estimate of the benefits which these institutions, when properly managed, are calculated to afford. There were 336 patients treated in this institution during the year ; 256 were discharged and 80 were still under treatment ; of those discharged, 198 were, it is hoped, permanently reformed, and 58 were discharged unimproved. With reference to the causes of intemperance in these cases,—102 attributed it to affliction, reverse of fortune, love matters, etc., and 122 had intemperate parents or ancestors. Their occupation was as follows : bankers and brokers, 8 ; book-keepers, 16 ; clerks, 35 ; clergymen, 5 ; druggists, 5 ; farmers, 6 ; hotel keepers, *only* 5 ; lawyers, 17 ; merchants, 58 ; manufacturers, 8 ; machinists, 7 ; mechanics, 6 ; physicians, 10 ; *no* occupation, 28 ; miscellaneous, 42. 244 of these used tobacco, 12 were innocent of that vice.

There can be no doubt in the mind of any one, who has given the subject the least attention, that these institutions are doing a vast amount of good, where they have been perseveringly tried, and the success which has attended them affords sufficient encouragement to justify and render most desirable the establishment of inebriate asylums in the several provinces of Canada, in numbers equal to the necessities of our population.

CONJOINT EXAMINING BOARD IN ENGLAND.

The subject of a Conjoint Medical Examining Board has been under discussion for some time in England, without any definite results having been arrived at. The British Medical Council has repeatedly affirmed the principle of conjoint examinations, and has also done much to establish it upon a permanent and satisfactory basis. During the session of the Council, which took place in March last, the subject was again up for discussion. Last year a Committee of Reference was appointed to take this subject into consideration. This committee, composed of men eminently qualified for the matter in hand, has bestowed much time and labour on the subject. They have drawn up a detailed scheme which has received the approval of the Colleges of Physicians and Surgeons, and which they have reason to expect will also be approved by the Universities. The scheme is, therefore, now brought almost to completion, and it is intended that it shall come into operation at the beginning of October of the present year. The only difficulty in the way at present is that the University of London and the Society of Apothecaries find that they cannot join in the scheme without an amendment to their charter; but this, it is thought, can be overcome by a short act of Parliament.

The principal features of the scheme are as follows :—That the following be the number of examiners to be appointed in the several subjects of examination : On Anatomy and Physiology, 8 ; Chemistry, 4 ; Materia Medica, Botany and Pharmacy, 4 ; Medicine, 8 ; Surgery, 8 ; Midwifery, 6. That no examiners be appointed at present in Forensic Medicine, but that questions on this subject be included among those in Chemistry, Medicine, Surgery and Midwifery. There are to be two examinations, primary and pass, each being partly written, partly oral and partly practical. No candidate is to be examined by a teacher of his own school. At the written examinations not less than two examiners are to be present. The subjects of the primary examination shall be—Anatomy, Physiology, Chemistry, Materia Medica, Botany and Pharmacy. The subjects of the pass examination shall be—Medicine, Medical Anatomy and Pathology, Surgery, Surgical Anatomy and Pathology, Midwifery and diseases of women. The members of the Committee of Refer-

ence shall act as "visitors of examinations." A meeting of examiners shall be held on a day shortly before the commencement of the written examinations, at which one or more members of the Committee of Reference shall be present, and at which all the questions proposed to be set in writing shall be read for approval. The questions are to be printed on the day preceding, or on the morning of the examination, in the presence of some duly appointed official, in whose custody they shall be kept until delivered to the proper examiner, and as a general rule the number of questions on each paper be six, and the time allowed to answer them be three hours. A meeting of the examiners shall be held as early as convenient at the close of the examination to decide upon the passing or rejection of candidates, and finally the Committee of Reference shall present annually to each of the co-operating medical authorities a report, including a statement of the number, names and places of study of those who may have passed, also of those who may have failed to pass, any of the examinations during the preceding year.

Candidates who have successfully passed this Conjoint Examining Board can receive the qualification of any one, or more, of the co-operating medical authorities on payment of the usual fees charged for the same.

There are some portions of the scheme which we think are very good, but there are others which are somewhat objectionable, and however suitable they may be to a country like England, would not be at all adapted to the wants of the profession here. In the first place, the number of examiners appears to be entirely in excess of what is necessary or expedient. Some members of the profession here have been clamoring against the size of our Board. What would they say to a board of 40 examiners? The subjects of Forensic medicine and sanitary science, both of them of very great importance, have been overlooked by the Committee of Reference. The department of public medicine, is one in which the medical profession, both at home and abroad, suffers much from the ignorance and incompetence of its members, and one in which all candidates should be required to pass a satisfactory examination before receiving the license to practice. We also think that these examinations should be competitive, and with that object in view the oral examination should be dispensed with, and we take the liberty of remarking in this connection that this feature in the examinations before our own

Council Board, is not only useless but very expensive, and might be done away with, without in any degree injuriously affecting the interests of the profession, or the student. The opinion of the majority of those who have had considerable experience in conducting examinations of this kind is against the continuance of the oral examinations, and especially is that felt to be expedient, inasmuch as the examinations are competitive. The feeling which has been openly expressed by some members of the Board in reference to the oral examination is, that when the candidate is brought face to face with the examiner, he either knows and feels an interest in him, and puts such questions as will assist him in passing, or feeling no particular interest in him, puts his questions in such a way as may be calculated to puzzle the candidate and fortify the examiner in the opinion which he has already formed of the character of the answers in the written examination. But apart from this there is still another reason why, under existing circumstances, the oral examination should be dispensed with. It is very expensive. The oral examinations alone have cost the Council, for the past three years, not less than \$1300. We ask, Does it pay? We think not. The character of the written questions might be improved, the time allowed for answering them increased so as to give all a fair opportunity, and if this were done the necessity for the oral examination would not exist. As a general rule the candidates who really require the extra oral examination should not be allowed to pass, and, therefore, we believe that no injustice would be done to any one through its discontinuance.

ALLEGED MALPRACTICE.

At the late Assizes an action was brought against Dr. Thorburn, of this city, for alleged malpractice in the treatment of a case of Colles' fracture of the wrist. The plaintiff, a woman about 40 years of age, a cook in Mr. Heward's employ, fell down stairs and fractured the radius. This took place on the 19th of November, 1871. Dr. Thorburn was sent for and immediately put up the fracture on a temporary appliance. In a few days he called again and put it up on a pistol-shaped splint. He called several times during the next fortnight. At the end of that time the plaintiff went into the coun-

try, but returned at the end of a week. The Dr. examined the wrist and found it all right, and ordered her to return in another week. The case went on in this way until the end of the 8th week, union being rather tardy, when the doctor took off the splint and applied a starch bandage, which remained on two weeks. The hand appeared rather stiff, but the Dr. told plaintiff that it would be perfectly strong and that she would regain the use of it in time. She returned again in March. Dr. Canniff was called in to examine it, and he and Dr. Thorburn both agreed that union had taken place, and that plaintiff would recover the use of the hand by degrees. About the 1st of May she went to Dr. Lizars and was under treatment for about two or three months, during which time the hand continued to improve.

Several medical men in the city were summoned to give evidence in the case, both on behalf of the plaintiff and defendant. The only witnesses called upon were Drs. Hodder and Valentine. Dr. Lizars was summoned but did not put in an appearance. Dr. Hodder stated in his evidence that he had seen the case some time in May last in company with Drs. Bethune, Lizars and Thorburn; there was some deformity although not more than might be expected in this form of fracture, and he thought that union was not so firm as might be expected after such a lapse of time; the application of splints always has a tendency to make the limb stiff, whether there is fracture or not; that unless there was tardy union he would not continue the use of splints more than four weeks; the stiffness would arise from effusion into the sheaths of the tendons; deformity was not necessarily the result of treatment; the best authors say that deformity will take place in this form of fracture under the most skilful treatment; had in his own practice cases of fracture such as this, where deformity ensued notwithstanding all his care; thought the plaintiff would yet have a good useful hand and it would improve the more she used it. The evidence of Dr. Valentine was of similar import. His Lordship Justice Galt, before whom the case was tried, said there was no case to go to a jury. The testimony of Dr. Hodder disclosed nothing to show that there had been either neglect or want of skill in the treatment. A non-suit was, therefore, recorded. His Lordship observed to the jury that medical practitioners had hard work and often little thanks for it, and they ought to have this protection thrown over

them, that when they had used their best efforts in the treatment of a case, they should do so without fear of prosecution if the result should prove untoward. We were very glad to hear his Lordship speak out in this manner regarding such matters. While it is quite right that medical men should bestow every care and attention upon the cases they undertake, it is very hard to be mulcted in heavy damages for every slight mistake, or want of success, which may attend a surgical case. Against no other profession is such vexatious pettifoggery had recourse to, and a few such rebuffs as the above would have a very salutary effect in putting a stop to such vexatious actions. Several malpractice cases have occurred in different parts of this Province during the past two months, and some of these, of a most vexatious kind, have been instigated by fellow-practitioners. It is bad enough when hungry lawyers and greedy clients try to fill their maws and line their pockets by bringing actions for damages against medical men, but it is much more to be regretted when members of our own profession so far forget what is due to themselves and the calling they have chosen as to condescend to such miserable pettifoggery.

CONJUNCTIVAL TRANSPLANTATION FROM THE RABBIT.

Dr. Wolfe, surgeon to the Glasgow Ophthalmic Institution, reports (*Glas. Med. Four.*) two successful cases of conjunctival transplantation from the rabbit. One of the patients experimented upon was admitted into the Hospital for the relief of symblepharon. There was adhesion of the lower eye-lid to the eye-ball, the result of a burn. He separated the adhesion, and then took from the rabbit that portion of the conjunctiva which lines the inner angle covering the membrana nictitans, and extends as far as the cornea—enough to replace the lost conjunctiva of the patient—and secured it in place with four fine stitches. The stitches were removed on the fourth day, the conjunctiva retained its vitality, free motion of the eye-ball was obtained and the eye rendered useful. In commenting on these cases, he says : there is a large class of patients whose eye-tissues are perfectly healthy, with the exception of corneal opacity, and the question arises, Shall we be able to supply them with trans-

parent corneæ by transplantation? All attempts formerly made in that direction have failed. Dr. Power, of St. Bartholomew's, London, has been so far successful, that the cornea of a rabbit grew upon that of a child, but unfortunately it was opaque. Dr. Wolfe suggests an improvement, by making a cornea-conjunctival flap. The conjunctival portion will not only give the cornea a point of attachment, but also improve its chance of vitality and transparency.

Notes and Comments.

FLOWERS AS PRODUCERS OF OZONE. — It appears from the researches of Prof. Mantegazza, of Pavia (Lombardy) (*Brit. Med. Jour.*), that ozone is developed in some plants by the direct rays of the sun, and that in others the action, once begun in daylight, continues throughout the night. Thus, the cherry-laurel, clove, lavender, mint, lemon, fennel, hyacinth and mignonette develop ozone largely when exposed to the sun's rays. The oxidation of the essential oils is also said to be a convenient source of ozone, and Dr. Mantegazza concludes that the ozonogenic properties of flowers reside in their essences, and recommends the cultivation of herbs and flowers in miasmatic districts and in places infested with animal emanations. Dr. Fox, in his recent work on ozone, also remarks that the cultivation of the sunflower, in malarious districts, has been specially urged, as it is said to possess the property of purifying air laden with marsh miasm, and of exhaling ozonized oxygen. If, therefore, there be protective virtue in these sweet gems of the earth, let their culture in every direction be largely encouraged.

VICTORIA MEDICAL COLLEGE.—The following gentlemen passed their primary and final examinations at the close of the recent examinations of this College:—Messrs. Nathaniel Brewster, John L. Burkhart, Alex. Douglas, Wm. H. Johnson, John Kirkpatrick, D. F. McDonald, Davidson McDonald, Peter McLean, and Wm. Philp. Honour Class—Wm. H. Johnson, Gold Medallist; Nathaniel Brewster, Silver Medallist; Mr. Davidson McDonald, honorable mention. Scholarships—Messrs. Peter McLean and John Kirkpatrick.

NOVA SCOTIA MEDICAL ACT.—A correspondent in the *Lower Provinces* sends us the following note :—"With regard to the act of our Legislature in reference to the medical profession, mentioned in the March issue of the *LANCET*, we have had in the Province of Nova Scotia, since 1856, an Act compelling all persons practising medicine, surgery or midwifery, to register, in the Provincial Secretary's office, the credentials on which they founded their claims to practise, under the penalty of forfeiting fees and a fine of \$20. During the Session of Parliament last winter, stringent amendments were made to the same, in favor, I presume, of Canadian and English graduates (*i.e.*, medical schools)."

MEDICAL ACT FOR THE DOMINION.—At a meeting of the medical profession at Ottawa in February last, a resolution was passed in favor of a Medical Act for the Dominion. This matter has been before the Canada Medical Association for some time, but could not be agreed upon, and was, therefore, at the last meeting indefinitely postponed. One reason why the proposed Dominion Medical Bill met with so much opposition was because it appeared to have been framed in the interest of one section of the Dominion. We believe, however, that a measure can be framed, if properly gone about, which will be acceptable to the profession in all parts of the Dominion, but the time has not yet come.

WHO ARE YOU?—A medical man in Newfoundland has returned a copy of the *LANCET*, with the remark that "there are already more medical journals in the world than the profession has any use for." Unfortunately he has not given us his signature. If he will be kind enough to do so, we will be most happy to strike his name from our list.

MEETING OF THE MEDICAL COUNCIL.—The next meeting of the Medical Council of the College of Physicians and Surgeons of Ontario is expected to take place a little earlier than usual, probably some time during the present month. The 20th inst. has been spoken of by some as the date fixed upon.

BISHOP'S COLLEGE MEDICAL SCHOOL MONTREAL.—The following gentlemen passed their final examination and were presented for the Degree of M.D. :—Geo. F. Flock, M.R.C.S., Eng., R. F. Godfrey, G. B. Shaw, F. C. Lawrence, W. McDonald, G. Dubuc, I. Fontaine, and G. N. Peltier.

TRINITY COLLEGE MEDICAL SCHOOL.—The following gentlemen have successfully passed their primary and final examinations in this institution :—Messrs. W. Blake, W. Brock, W. W. Bredin, A. M. Dingwall, C. East, D. B. Frazer, D. Frazer, J. W. Gracey, H. Howitt, W. T. Harris, L. D. Healy, W. Irving, L. J. Lennox, W. Lowry, A. McLaren, C. S. Murray, D. W. Mitchell, T. Millman, J. McDiarmid, C. F. Patten, J. D. Thompson and T. W. Reade.

The convocation for conferring degrees took place on the 10th ult., and the following gentlemen were presented :

For the degree of M.D.—Richard Ardagh Callighen and Walter Lambert.

For the Degree of M.B.—W. Blake, W. W. Bredin, A. M. Dingwall, C. East, H. Howitt, A. McLaren, C. S. Murray, D. W. Mitchell, C. F. Patten and Thos. Millman.

University Gold Medalist.—A. M. Dingwall.

“ Silver “

Faculty Gold Medalist.—H. Howitt.

“ Silver “ W. Blake.

Certificates of Honor—In the final examination.—C. East.

“ “ In the primary.—D. B. Fraser, D. Fraser, W. Lowry, J. W. Gracey.

MCGILL COLLEGE MEDICAL SCHOOL MONTREAL.—The following gentlemen have successfully passed their final examination in this University and were admitted to the degree of M.D., C.M., on the 28th of March, 1873 :

D. O. Alguire, R. W. Bell, H. Brown, D. A. Carmichael, N. E. Chevalier, F. A. Cutter, O. C. Edwards, I. R. Ellison, W. Ewing, J. J. Farley, L. M. Fortune, E. A. Gaviller, T. F. Guest, J. Hills, R. N. Hurlburt, W. F. Jackson, H. J. M. Jones, T. Kelley, E. G. Kittson, B. D. McGuire, J. B. McConnell, J. McDiarmid, J. D. A. McDonald, J. McLeod, R. S. B. O'Brian, D. O'Brien, H. R. Perry, P. E. Richmond, F. J. Shephard, J. A. Stephenson, A. W. Tracey, G. O. Walton, W. T. Ward, R. C. Young, I. W. Whiteford.

Holmes' Medalist.—T. Kelly.

Prizeman (Books.)—D. O. Alguire.

Honorable mention.—F. J. Shephard, D. A. Carmichael, H. J. M. Jones and R. W. Bell.

OPENINGS FOR MEDICAL MEN.—In the village of New-Hamburg, county of Waterloo, a well established village and country practice, together with valuable property, will be sold cheap. For particulars apply to Dr. J. N. Steifelmeyer, New-Hamburg, Ont. There is also a good opening for a medical man in the village of Cheltenham, county of Peel ; also in Mille Roches, county of Stormont, Ont.

QUININE IN WHOOPING-COUGH.—Dr. Dawson, in an article in the *Am. Journal of Obstetrics*, strongly advocates the use of quinine in the treatment of whooping-cough. He quotes various eminent authorities in support of this plan, in addition to his own experience, which has extended over a period of several years, and embraced the management of a large number of cases. He states that it should be given *in solution*, so that it may come in contact with the mucous membrane of the pharynx, and thereby destroy the fungi with which this is covered. Neglect of this rule he considers the reason why other observers have not seen such positive results from the use of this remedy. We have been in the habit of using quinine dissolved in nitric acid, and can bear testimony to its efficacy in this affection, especially when combined with the "open air" treatment.

CASTOR OIL EMULSION.—In a former issue we drew the attention of the profession to "Wilson's Castor Oil Emulsion," a disguised castor oil which has been advertised in our columns for some time. We understand the preparation is a great success, being generally patronized by the profession, and now in use in every province of the Dominion from Prince Edward's Island to Manitoba. It has lately been very much improved, and in its present form is certainly a most agreeable and effectual substitute for castor oil.

NOTES ON HOSPITAL PRACTICE.

(*Reported by Mr. Nevitt, Toronto General Hospital.*)

J. B., admitted into the Hospital under the care of Dr. Bethune, was by occupation a sailor. 30 years ago he received a blow over the left eye, from the effects of which he never recovered. The sight is entirely gone, and the right eye is now suffering sympathetically, the sight becoming much impaired. The eye looks red, congested and inflamed, and is painful, and a source of constant annoyance. The patient is a hale, hearty looking man of 60 years of age.

Oct. 25—Enucleation of the left eye was performed to-day. A wire speculum being introduced for the purpose of keeping the lids apart, the conjunctiva was caught up by a pair of Iris forceps and snipped off with a pair of curved blunt-pointed scissors. The membranes lying underneath were severed close up to the eye ball—the

tendons of the various muscles of the eye were then successively caught up with a blunt hook and divided. The eye ball being brought well forwards, the optic nerve was severed, and the eye rolled out entire. The only instruments used being the speculum, scissors, forceps and hook. The hæmorrhage from the ophthalmic artery was arrested by the application of a little cold water. The cavity was then stuffed with lint and a pad placed over it; both eyes bandaged and the patient put to bed in a dark room.

Oct. 27.—There is but slight pain and very little oozing, with some healthy looking pus. His bowels being costive two Comp. cath. pills were given.

Nov. 1.—Discharge has almost ceased—complains of no pain. Bandage from right eye removed to-day.

Nov. 2.—States that his vision has improved, inasmuch as he was able to write a letter without the aid of his spectacles, a thing that he has not been able to do for a long time.

T. S., æt. 45, admitted Oct. 24th, under Dr. Aikin's care, was crossing the railway track when an engine struck him and threw him 10 or 12 feet, and lighting on his left foot in a crotch of the rails, fractured his leg. The tibia and fibula were both broken, and about the lower third of the leg could be distinctly felt. The foot upon the outer side and on the sole, was entirely denuded of skin, the os calcis fractured, the astragalus fractured and dislocated forwards, the cuboid, and in fact nearly all the tarsal bones being more or less injured. The foot was œdematous, and cold blood flowing from the wound. An operation was determined upon at once, but the patient, after being placed upon the table, refused to allow the operation to proceed. He was then placed in bed and a poultice applied, the wound continuing to discharge an offensive sanious fluid, the foot growing colder and colder and becoming quite black, giving off a most horrible stench.

Oct. 25.—The patient, looking pale, haggard and worn, pulse rapid, and complaining bitterly of pain, still refused to believe that his leg could not be saved. Stimulants and morphine were given at intervals.

Oct. 26.—Patient sinking and still obstinate.

Oct. 27.—He has at last consented to an operation. The leg was amputated below the knee. On sawing the bones the tibia was found to be splintered high up, almost extending into the knee joint. The flaps were put up in the usual way and the patient placed in bed, with the leg elevated.

Oct. 28.—Large quantities of pus keep coming away, pulse rapid, tongue foul and coated.

Oct. 29.—The sutures had all to be taken out and the flaps fell apart, large quantities of pus flowing away; poultices to be applied.

Oct. 31.—Discharge is still enormous, though the stump looks healthier; pulse better. The bowels not having been moved since the operation two Comp. cath. pills were given.

Nov. 1.—Improving slowly. Discharges a good deal though not quite so much.

Nov. 16.—Granulations springing up and looking healthy. A good deal of pus flows away from the upper part of the wound, from around the end of the tibia.

Nov. 22.—The flaps to-day were brought together as nearly as possible, by two points of silver-wire suture. The points being about an inch apart and continuous, a small, thin piece of wood being inserted between them and the wire, passing over the wood on the posterior flap; on the anterior the ends of the wire were twisted over a second slip of wood placed in a similar position, thus rendering the pressure more uniform, preventing the wire from cutting the flesh, and at the same time allowing the pressure to be easily increased by twisting the ends of the wire. A couple of broad bands of strapping were also put on firmly. The wound to be dressed twice a day, each time the pressure to be increased as much as possible. Under this treatment the flaps were gradually made to coalesce, and ultimately formed a good stump.

DEATHS.

At Pakenham, Ont., on the 4th of February, E. B. Gibson, M. D., in the 33rd year of his age.

In Montreal, on the 29th of January, William Sutherland, Jr., M.D., in the 26th year of his age.

In Montreal, on the 6th of February, Dr. Alfred Nelson, of aneurism of the arch of the aorta. Dr. Nelson was a licentiate of the College of Physicians and Surgeons of Quebec. He was a man of great promise, and his death is much regretted by all those who knew his abilities and kindness of disposition. He lost his wife in her confinement, two years ago, and leaves behind him six small children.

In Montreal, on the 23rd of March, Charles Picault, M.D., son of Dr. P. E. Picault, a well-known practitioner in Montreal. He graduated at McGill College in 1857, and has been in practice since that time, in connection with his father, in the city of Montreal. He was a great favorite among his friends, fellow-students and practitioners, and many will hear with regret of his early demise.

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Original Communications.

A BRIEF REPORT OF CASES OF SYMPATHETIC OPH-
THALMIA AND SYMPATHETIC IRRITATION.

BY A. M. ROSEBRUGH, M.D., SURGEON TO TORONTO EYE INFIRMARY.

*(Read before the Medical Section of the Canadian Institute,
May 16th, 1873.)*

About two years ago I had the privilege of reading a paper before this Society on Sympathetic Ophthalmia, in which I endeavoured to point out :

1st. That Sympathetic Ophthalmia is a peculiarly destructive form of inflammation of the eye, arising solely from irritation in the opposite eye, and that, as a rule, it runs its course unchecked, and the patient is left hopelessly blind.

2nd. That the most common cause of Sympathetic Ophthalmia, or Sympathetic Irritation, is injury to the opposite eye, particularly wounds in the region of the ciliary body ; and

3rd. That the only possible means of arresting the progress of the disease is the early removal of the injured eye, and that in all cases when the injured organ is enucleated before Sympathetic inflammation is actually established, even although it may be already

very much weakened from Sympathetic Irritation, the uninjured eye never becomes affected with Sympathetic Ophthalmia.

The following cases illustrate some of these points. They are arranged according to the length of time that intervened between the date of injury and the appearance of Sympathetic trouble in the uninjured eye. Eight are cases of Sympathetic Ophthalmia, and three are cases of Sympathetic Irritation.

I.—SYMPATHETIC OPHTHALMIA.

CASE 1.—*Total blindness in three weeks after injury of one eye from Sympathetic Ophthalmia.*

Peter John H., of Listowell, aged 16. Four years ago last March he was hooked by an ox, the horn rupturing the eye-ball and a portion of the vitreous humour escaping. The wound healed, but remained irritable, and two weeks after the accident the uninjured eye became sympathetically affected, and one week later he was perfectly blind. I saw the case about two years after the accident, and found both eyes destroyed as organs of vision. He is now in the Institution for the blind at Brantford.

CASE 2.—*Total blindness in five weeks from wound in one eye.*

Mrs. A. W. B., of Little Scotland, Co. Brant, had an injury in one eye in February last. Some boys were exploding a percussion cap, while she was looking on from a distance of six or eight feet. A piece struck the eye in the ciliary region. The sight of that eye soon became impaired and the eye painful. In five weeks she complained that the uninjured eye felt "weak," and by the end of the sixth week she was blind in both eyes. I saw her three weeks later, and found a cicatrix in the sclerotic just external to the margin of the cornea. The eye was irritable and the tension reduced. The pupil was closed and the perception of light reduced to a minimum. On examination of the uninjured eye I found the pupil closed with plastic exudation, but the inflammation had subsided. The quantitative perception of light was good. I recommended the immediate removal of the injured eye, and subsequently an artificial pupil operation on the other eye, but as the patient had a great dread of chloroform, she declined operative interference.

CASE 3.—*Total blindness from Sympathetic Ophthalmia six weeks after injury of right eye.*

Joseph H., aged 22, Delaware, Ont. The right eye was injured

in September, 1870, from the recoil of a piece of spring wire. The steel caused a penetrating wound of the cornea and prolapse of the iris. The wound healed in about ten days and the sight recovered completely. In about two weeks after the accident he had an attack of what his physicians called conjunctivitis, supposed to be caused by exposure to the dust of a threshing machine. This congestion of the conjunctiva was probably symptomatic of ciliary irritation caused by dragging upon the ciliary processes on account of the prolapse of the iris. The eye recovered from this attack, but in about three weeks later the eye again became inflamed, the disease extending to the iris and closing the pupil. One week later, or six weeks after the injury to the left eye, sympathetic irido-choroiditis was set up in the left eye which resulted in total blindness. He is also at the Institution for the blind at Brantford.

CASE 4.—*Total blindness from Sympathetic Ophthalmia eight weeks after wound of right eye.*

Samuel McC., aged 36, Mt. Pleasant. Right eye wounded in June, 1871, from splinter of wood while chopping. The wound was in the sclerotic, just external to the cornea, and extending into the ciliary region. About three weeks after the accident, he came to Toronto for advice. The surgeon whom he consulted did not recommend any interference, and he returned without anything being done for him. I saw the case in October; about four months afterwards, and found that the injured eye was quite destroyed, and that the pupil of the other eye was quite closed from plastic exudation. I then learned that the inflammation had set up in the then sound eye almost exactly six weeks from the date of injury of the other eye. The injured eye was enucleated and an iridectomy performed upon the opposite eye. Vision was somewhat improved by the artificial pupil. He returned in February, 1872, for a second operation. Unfortunately suppurative inflammation followed the operation, and he is now hopelessly blind. I learned subsequently that at this particular time erysipelas and puerperal fever were unusually prevalent in Toronto and vicinity. The suppurative inflammation following the operation upon the iris may have arisen from the same predisposing atmospheric cause.

CASE 5.—*Blindness in one eye and Sympathetic irido-choroiditis in the other seven weeks after injury. Good result.*

R. S. H., of Consecon, while driving a nail, Feb. 15, the nail

broke and the end struck the left eye in the ciliary region. He was sent to me by his family physician four weeks after the accident. The eye was then filled with blood and quite useless; the sclerotic was ruptured in the ciliary region. He returned home with a note to his physician pointing out the danger to be apprehended, and recommending that both eyes be closely watched. He returned in three weeks, led by his brother. The injured eye was about the same as when I saw it last, with the exception that there was less hæmorrhage and he could see the light from the ophthalmoscopic mirror brighter than before. On examining the right eye, however, I found the pupil irregular and other symptoms of Sympathetic irido-choroiditis. The injured eye was enucleated the same day under chloroform. The right eye was placed under treatment and it commenced to improve immediately. In two weeks he returned to Consecon; the inflammation relieved, vision restored and wearing an artificial eye.

CASE 6.—*Total blindness from Sympathetic Ophthalmia two months after wound of left eye.*

The following very brief memorandum is copied from my journal for 1871. I cannot now recall the case. Hamilton P., Toronto, aged 21. When six years of age the left eye was wounded with a scythe. The eye remained full size after the accident, but the sight was destroyed. Four weeks afterwards the sight of the right eye commenced to fail, and in about two months from the date of the accident he was quite blind.

CASE 7.—*Total blindness from Sympathetic Ophthalmia in nine months after wound of left eye.*

Hester L., aged 21, County of Hastings, gives the following account of her case :—At eight years of age, the left eye was wounded with a stick of wood. The "pupil" was cut. The accident occurred at Christmas time. The wound was healed in about a month, but that eye was quite blind. She went to school for eight months, when the right eye began to fail. At first she noticed that there was occasionally a blur over the letters in reading; this increased, and both eyes became quite painful; the sight continued to fail until the month of October, when she found herself quite blind in both eyes. She has now been blind 13 years. Both eyes are atrophied.

CASE 8.—*Total blindness from Sympathetic Ophthalmia fifteen months after wound of right eye.*

George B., aged 18, Toronto, has been blind for 4 years. When about 12 years of age, he had a wound of the right eye with a piece of glass, which resulted in the loss of sight in that eye. The sight in the other eye began to fail in about a year after the accident. Six months after he applied for relief at the then Toronto Eye Dispensary, when he was found to be quite blind. His right eye was slightly atrophied (tension reduced) and tender to the touch, the direct result of the wound eighteen months previously. The left eye was full and the tension normal, but the pupil was completely closed, and the iris adherent to the anterior capsule of the lens, (posterior synechia) the result, undoubtedly, of sympathetic irido-choroiditis. The right eye was enucleated, and subsequently an artificial pupil operation was performed on the left, but without avail. The eye subsequently atrophied. He is also in the Brantford Blind Institute.

II.—SYMPATHETIC IRRITATION.

CASE 9.—*Sympathetic Irritation three months after wound of opposite eye. Good result.*

Robert L., aged 45, Toronto. About March 15th, 1869, the eye was wounded by a piece of iron rivet, in using a hammer and chisel. The wound extended from the cornea into the ciliary region. The sight was destroyed, and the eye kept tender until June 15th, when he first came under observation. The wound had quite healed, but the eye was sensitive to the touch. The opposite eye to all appearance was healthy, but he complained of its being so weak, that he could neither read nor return to his work. In technical language, he had sympathetic irritation. A consultation with the family physician was suggested, but he was not seen again for two weeks, when the consultation was held, and the enucleation of the injured eye decided upon, to which he only gave a reluctant consent after the strongest representations were made to him by his clergyman and family physician. In a week's time the eye was perfectly healed, and in less than two weeks he was at work again.

CASE 10.—*Sympathetic Irritation from wound of the opposite eye twelve months previous. Good result.*

Daniel M., of Lindsay, aged 33. In March, 1870, while cutting hot iron with a chisel, a piece hit the eye and ruptured the sclerotic. His physician sent him to Toronto, and

three sutures were introduced. The wound was healed in three weeks. He returned to his home and his business as a blacksmith. The sight in that eye was destroyed, and the eye was occasionally a little sore, but he kept at his work for 12 months, when he returned to Toronto, no longer able to continue his business on account of Sympathetic Irritation. The injured eye was enucleated, and in a week's time the other eye was quite strong again. A week later he left Toronto wearing an artificial eye.

CASE II.—*Sympathetic Irritation. Piece of steel in the eye eighteen years. Good result.*

A. R. H., Toronto. Right eye blinded 18 years from a piece of steel entering and remaining in the eye. No irritation in left eye until 12 weeks before he applied for relief. Left eye was then (Dec., 1869) so "weak" that he could neither read nor work. The injured eye was atrophied and a little tender. It was removed, 16th Dec. Four weeks afterwards his report is that his eye is all right. When last seen, 12 months ago, he was at work and wearing an artificial eye.

GENERAL CONCLUSIONS.—From these and other cases of sympathetic diseases of the eye that have come under my observation, I have been led to draw the following conclusions, which are in full accord with the conclusions of others; and which I take the liberty of expressing in language similar to that of Mr. Lawson in his admirable treatise on "Injuries of the Eye."

1st.—That Sympathetic Ophthalmia is a peculiar inflammation of one eye, originating solely from an irritation in the other.

2nd.—That the most frequent causes of Sympathetic Ophthalmia are penetrating wounds of the eye, and especially those which involve the ciliary region; and foreign bodies within the eye.

3rd.—That Sympathetic Ophthalmia usually takes the character of a malignant form of irido-choroiditis, with a tendency to a rapid effusion of lymph, capable of speedy organization.

4th.—That the disease once started is very difficult to arrest; that it is recurrent in its nature, and that when once fully established it often runs its course unchecked, to the complete destruction of the eye as an organ of vision.

5th.—That the removal of the injured eye affords the best chance of arresting the disease; and that, as seen in Case 5, if this operation is resorted to in its early stages, there is a good prospect

of its doing so. Hence the importance of diagnosing in what cases of injury, Sympathetic Ophthalmia is likely to follow, and the necessity of at once removing such injured eyes which are prone to produce it, and especially if they are already lost for all visual purposes.

Before proceeding to a description of the operation of enucleation, with which I will bring this paper to a close, I would add that in my opinion every surgeon might be qualified to perform this operation. It is not nearly so formidable as generally supposed, and the hæmorrhage is usually very slight. The wound is generally perfectly healed in six days, and an artificial eye may be worn in less than three weeks. The eyeball alone being removed, the conjunctiva and muscles form a cushion upon which the shell of the artificial eye rests, and which enables it to move in concert with the other eye.

The patient is placed on his back and brought under the influence of chloroform. The eyelids are widely separated by means of the spring (self-retained) speculum. The conjunctiva is seized near the cornea with a pair of fixation forceps; the raised portion is snipped with a pair of strabismus scissors; the points of the scissors are introduced through the wound, and the conjunctiva is dissected up for some distance on each side of the wound, and following the circumference of the cornea. This loosened portion of conjunctiva is detached close to the cornea by several snips of the scissors. A portion of conjunctiva on the opposite side of the cornea is seized, dissected from the sclerotic, and detached from the cornea in the same manner. When this part of the operation is complete, there should be a circular incision through the conjunctiva close to and surrounding the cornea. This opening is sufficiently large for the passage of the bulb. The recti muscles are successively picked up with a strabismus hook, and divided with the scissors. It is an advantage to use two hooks, the one being introduced before the other is withdrawn. The optic nerve is usually severed with a pair of scissors, but I consider it an improvement to divide the nerve with a blunt-pointed bistoury. The eye-ball is made to advance through the conjunctival opening, and seized with the thumb and finger; the blunt-pointed knife is introduced on the nasal side, far back into the orbit. The nerve can be readily felt, it being slightly on the stretch. It is divided, and as the eye is being brought forward, the oblique muscles are divided. As a rule, but little after-treatment is required. One fold of wet lint should be kept over the eyelids for a few days, and the bloody discharges from time to time removed.

PUERPERAL CONVULSIONS.

BY JNO. A. LANGRILL, M.B., JARVIS, ONT.

As so many cases of this formidable disease have been recorded within the past few years, in connection with its treatment with Potass. Bromidi, I will give a brief report of the leading features and peculiarities of the following case :—

Mrs. H——, æt 28 years—primipara—tedious labor—was seized in the afternoon with convulsions during a powerful pain. As soon as possible I applied the forceps and delivered, but not before the occurrence of another paroxysm. On the birth of the child I found the cord torn obliquely across, about three or four inches from the umbilicus, and on the removal of the placenta, that portion attached to it was only five or six inches in length.

Between the attacks she lay in a semi-conscious state with a good deal of muscular twitching. Hoping that after delivery the convulsions would not return, I awaited the lapse of the previous interval, about twenty minutes, when another paroxysm, equally severe, occurred, and was followed by deeper coma. I then gave thirty grains of the Bromide, and repeated it in half an hour.

The next interval was rather longer and the spasm not quite so severe, but by the time that she came fully under the influence of the Bromide the twitching almost ceased, and the interval was at least four times as great, while the next attack was very slight.

On the arrival of my friend, Dr. Covernton, of Simcoe, an hour and a-half after this, she had had no return of the convulsive attack, but lay in a quiet stupor, from which she could be partially aroused with great effort.

We concluded to give the Bromide and Chloral per anum, as she had vomited the latter when I had tried it by the stomach.

She had only one mild convulsion after this, and the only further treatment was the administration of chloroform in small quantities at intervals through the night to quiet restlessness, and as an additional precaution against the return of the paroxysms. Of the latter there were seven in number, the first three of which were as violent as any epileptic convulsion I have ever witnessed.

In the morning everything was discontinued, and she gradually became conscious ; but, unaware of the ordeal through which she

had passed. Her convalescence was uninterrupted, and her child, healthy at birth, continues so.

I might remark that the pelvis was capacious, the os dilated, and the pains powerful; and I can only attribute the *non-exit* of the child, at least an hour sooner, to the abnormal shortness—about eight inches—of the cord.

Apropos to the latter I might here describe another interesting case which I attended on the 10th inst. Mrs. M—— was in labor with her eighth child. As soon as the occiput emerged I found the cord tightly entwined around the neck, but I succeeded, with more than usual difficulty, in slipping it over the head.

To my great surprise the child—a remarkably large and well developed one—was “still-born,” and our greatest efforts failed to re-animate it. From the first both child and funis were pulseless and very pale. Finding all in vain I divided the cord, from which not a drop of blood exuded.

The explanation was soon evident, for on the expulsion of the placenta soon after, I discovered a common, plain knot on the cord about six inches from its junction with the placenta. Up to this point the umbilical vessels were distended with blood. The knot must have been slack till the descent of the child tightened it, and thus interfered with the circulation. The mother was sure she felt the foetal movements up to half an hour before its birth. The labor was in every other respect a natural one.

April 26th, 1873.

CASE OF COMPOUND PRESENTATION.

BY R. R. STEVENSON, M.D., UPPER STEWIAKKE, NOVA SCOTIA.

Mrs. E——, æt. 42; nervous temperament; delicate physique; has borne seven children; labors always tedious; first labor, footling; child dead; third labor breech presentation; delivered by a midwife of a still-born child. In her seventh, or last confinement, I was called to see her, about 2 o'clock, on the 20th of July, 1872. Her midwife, who had attended her in her previous confinements, told me that she was taken in labor on the previous day, about 2 o'clock; that she found on examination a mal-presentation, but

could not make out distinctly its nature, but thought it was a footling. About 10 o'clock, during a sharp pain, the waters escaped, and she was not long in making out the character of the presentation. She found the funis and left arm presenting and I was consequently summoned. An examination revealed that the membranes were ruptured; the waters totally evacuated; the funis largely distended and hanging through the os externum; pulsation feeble; the left shoulder presenting, and the left arm engaging the vagina; the parts were hot and tender from perhaps too much manipulation. As each pain, by forcing the child in its unnatural position into the cavity of the pelvis, was thereby lessening the chances for assistance, I at once decided on podalic version. With some difficulty I succeeded in introducing my left hand through the os uteri, and after considerable search secured the left foot. By gentle traction, during the absence of pain, I brought it down sufficiently to secure the other, and by moderate traction during the intervals of uterine contraction, I delivered the feet. The rest of the labor was conducted as an ordinary footling case. From feeble circulation of the blood, necessarily arising from the pressure that had been exerted upon the cord during labor, the child was still-born. A few smart slaps on the buttocks and a dash of cold water excited feeble efforts at respiration. The cord was now separated and the child shortly afterwards presented the appearance of a fine healthy boy, weighing about 12 pounds. Some difficulty was experienced in removing the placenta, a small portion of it being adherent to the surface of the uterus. As a consequence, considerable hæmorrhage took place before the removal of the secundines. My patient was now very much exhausted, and I began to fear that she would not rally from the shock, especially did the case appear alarming, as the uterus seemed flaccid and not disposed to contract. I dipped my hands in ice-water and applied their palmar surfaces over the uterine region. This produced vigorous contractions, and I now administered a little carbonic acid water, following with toast-water and wine; a large compress was laid over the uterine region, and a broad bandage, extending from the sternum to the symphysis pubis was tightly applied, with orders for my patient to remain perfectly quiet, in the horizontal position, for 6 or 7 days, and to use the bedpan and urinal as occasion might require. At the expiration of a fortnight she was able to sit up in bed, and by the

end of the month she was about her room. The administration of a few doses of citrate of iron and quinine for the relief of debility were all the medicines that I administered to her. Both mother and child now present the appearance of good health.

I have no special remarks to make in reference to this case, except to confirm Dr. Merriman's remark that "in all cases of compound presentation the pelvis is usually very large." These cases appear to be somewhat rare, as Drs. Clark, Collins and Jansen, if I am not mistaken, make no mention of a case of this kind as having occurred in their long and extensive practice; and Mesdames Lachapelle and Boivin mention only three cases as having occurred in 75,903 deliveries.

Correspondence.

To the Editor of the LANCET.

SIR,—In the LANCET for May, I notice a communication on "Extraordinary Anomalies in the Arterial Supply of the Upper Extremities," by M. Hillary, M.D., &c.

Dr. Hillary describes an instance, which came under his notice, of the axillary artery dividing into two trunks, one of which, after giving several branches to the shoulder and arm, viz: the subscapularis, posterior circumflex, superior and inferior profunda, and anastomotica magna, terminated as the *interosseous*; the ulnar and radial arteries coming from the other trunk, at a point somewhat above the elbow-joint. He says, "this is the only instance I can find of such a peculiar division," and then "as they approximate somewhat to this instance," gives extracts from Knox' edition of Frederick Tiedman's plates on the arteries, and from Sharpey and Ellis's edition of Quain's Anatomy, in which the *interosseous* is described as arising from the brachial artery, and concludes by saying, "in none of these instances have any of these great anatomists seen an example such as I have shewn you," &c.

If Dr. Hillary had consulted the new edition of Quain's Anatomy, edited by Sharpey, Thomson and Cleland, or Gray's Anatomy, he would have found something much more to the point. In the former, under the head of "Peculiarities of the Axillary Artery," we read as follows:—"The most important peculiarity in the trunk

of the axillary artery consists in its giving off a much larger branch than usual,—an arrangement which has been observed in the proportion of one out of every ten cases. In one set of cases, this large branch forms one of the arteries of the forearm; most frequently the radial, (about 1 in 33), sometimes the ulnar, (1 in 72), and rarely the *interosseous* artery, (1 in 506: R. Quain). In another set of cases, the large branch gives origin to the subscapular, the two circumflex, and the two profunda arteries of the arm; but sometimes only one of the circumflex, or only one of the deep humeral arteries, arises from it. In the second class of cases the divisions of the brachial plexus of nerves surround the common trunk of the branches instead of the main vessel." In Gray's Anatomy, under the same heading, we find exactly the same statement. Again in both Quain and Gray, under the head of "Peculiarities of the Brachial Artery," we find the following:—"The interosseous, after arising from the axillary or brachial artery, is commonly situated behind the main artery, and, on reaching the bend of the elbow, passes deeply between the muscles, to assume its usual position in the forearm."

The course, branches and anastomoses of the radial recurrent branch of the radial artery, as Dr. Hillary describes it, more especially that of the right extremity, is so common as to be given by some anatomists as the usual arrangement. (See Quain, new edition).

Toronto, May 9.

H. ROBERTSON, M.B.

Selected Articles.

STRICTURE—RETENTION OF URINE.

CLINIC BY D. H. AGNEW, M.D., PHILADELPHIA.

The man now before you comes with a history of urinary trouble of several years' standing. His statements in brief are as follows:—A gonorrhoea, heroically treated, progressed nevertheless to gleet, and in the course of a few months a diminution in the size of the stream began to be noticed. This decrease has gradually continued until the present time, when he finds the current twisted and irregular, due to the insufficiency in the force of the stream to properly dilate the meatus. He is also obliged to pass his urine very frequently, sometimes rising six or eight times in a night, and the act is frequently accompanied by severe straining.

His immediate difficulty, however, is retention of urine, for which he seeks relief. I will not, therefore, this morning give you a lecture particularly upon stricture, but will rather speak for a few moments upon the very important subject of *catheterization*.

The passing of a catheter is an operation which is of common moment, and yet it is so frequently badly done that I cannot but urge upon you its importance. The principal hindrances and obstructions to the act will usually be found to be strictures, or narrowings of the urethra at any portion of its course from the neck of the bladder to the meatus. These obstructions are found in all stages from a slight thickening to occlusion, but I believe that few of the so-called impermeable strictures are really so. All of you know that the urethra is surrounded and enclosed by muscles, so that every stricture becomes to a certain extent *spasmodic* in its character. Pure "spasmodic" occlusions are, however, rare; yet this peculiar element enters so largely into every attempt to pass an instrument down a narrowed canal that it should be fully recognized. That muscular tissue exists in the urethra itself is known not only by clinical experience but also by actual demonstration, it having been shown that the outer and inner layers of the muscular fibres of the bladder are continued down the urethra, the one layer passing just beneath the mucous membrane of the canal at its prostatic portion, while the outer passes around that gland to meet its fellow at the membranous portion, surrounding it completely. Separating again, the layers pass forward to the meatus, where they reunite to form the lips, the internal one in its course lying directly in the sub-mucous connective tissue, and the outer, externally to the corpus spongiosum, between its fibrous coat and body. Thus we see that the urethra has a muscular investment throughout its entire extent, with a double layer, however, at the meatus and membranous portion, while the prostate gland and spongy body are also included between similar planes.

A man the subject of stricture, to a greater or less degree, indulges too freely in eating, drinking or venereal excesses; his irritable urethra responds, and these muscles are thrown into a state of spasmodic contraction, induced also by congestion of the vessels of the part: he attempts to pass his water, and, being unable to do so, is alarmed, and his retention becomes, for the time, complete. Now under such a condition it is seldom necessary to use a catheter; a hot hip bath, rest, an enema of forty or fifty drops of laudanum, and ten drops of tinct. of belladonna by the mouth, being usually sufficient to completely relieve in a few hours. Should these fail, however, a large-sized catheter may be gently carried down, as I shall presently show you. The retention of urine which follows operations about the anus is purely irritable and spasmodic, but will frequently require the use of the instrument for several days, especially in irritable, highly sensitive females. In hysterical women retention may

occur upon the most trivial cause, but the less frequently the catheter is used in such cases the better it will be for both surgeon and patient.

We judge, however, from the history of the case before us, that this is a case of organic stricture, and we will sound him at once.

Catheters are of various forms and sizes. The silver ones being rigid are adapted to the greatest number of cases, although flexible ones, both with and without stilettes, are occasionally useful. The olive-headed bougie, or the vertebrated catheter, may be of service in special cases, when the canal is tortuous or when the middle lobe of the prostate is enlarged. You should also have in your possession an instrument of extraordinary length, for I have upon several occasions seen patients approach almost to the brink of the grave because the surgeon's catheter had not reached the bladder, the long distention having carried it high up in the pelvis.

I now inject this man's urethra with two or three drachms of warm sweet oil, and then take a silver catheter, No. 8, warm and oil it thoroughly, and grasping the penis with my left hand in such a manner as to open the meatus, enter the beak, holding the handle of my instrument directly over the *median* line of the patient's abdomen. Here let me say that there are but three requisites in the passing of a catheter; the first is, anatomical knowledge; the second, patience; and the third, patience. These well applied will render almost every impermeable stricture permeable. The point of the instrument should follow the lower wall of the urethra until the glans is passed, in order to avoid the lacuna which there exists in the roof, but from this point until the bladder is reached the upper wall should be followed closely, since pockets and depressions are much more frequently found on the floor. Remembering this precaution I permit the instrument to glide down the canal almost by its own weight, keeping the handle, as you will notice, always *directly over the median line* of the abdomen until the membranous portion is reached. I lay great stress upon this point, because by its observance you will be able to detect the slightest deviation which may occur at any point of its passage, and will avoid many failures. The "tour de maitre." I consider as intended for "stage effect." The point is now at the membranous portion, the most common seat of stricture, and as yet no obstruction has been found. Now, if you will look at this model of the urethra you will see that an entire change must be made in the direction of the instrument. The point is now to pass upward and backward, and will require that the handle of the instrument be brought downward to occupy a position midway between the thighs. This movement is one easily accomplished in a normal urethra, but when obstructions exist it becomes one of exceeding difficulty, and is the manœuvre in which many failures occur. In the first place let me inform you that if you will still keep the handle exactly in the *median line*, while you describe this arc of a circle, you will avoid

many of the false passages, lacunæ and folds which often exist. Keep the point along the upper wall; remember your anatomy; manipulate quietly, slowly, steadily, carefully; when arrested, withdraw and advance again, lest you have entered a false passage; employ no force, lest you perforate the already diseased walls; possess unlimited patience. If uncertain whether a false passage is entered place a finger in the rectum and guide the point. In determining this question, the tightness or laxity with which the instrument is held will often be of assistance, since a false passage usually holds it loosely and also imparts a sensation of roughness, though not of toughness, to the hand. The patient, also, will be frequently able to detect any deviation. In the present case I am arrested at the membranous portion, at about the point where it passes through the deep perineal fascia or triangular ligament. I place my finger in the rectum, and, having satisfied myself that the point has entered the constriction, I press very carefully, but unremittingly, upon it for at least five minutes, at the end of which time I can feel that the muscles are becoming tired in their resistance, and now as I engage the man in a moment's irrelevant conversation I throw them off their guard and my instrument is in the bladder, as you see by the full stream of water which flows.

Now this is a No. 8, and the organic difficulty here cannot be very great. By the constant use of progressively increasing-sized sounds, we may reasonably promise the man an ultimate cure, provided he will himself continue the use of a large instrument subsequently, for the rest of his life, at intervals of two or three weeks.

This man must now be put to bed, and given a full anodyne enema, for even the operation of catheterism is not infrequently followed by a severe train of symptoms known as "urethral fever."

Suppose, however, that we had failed with the No. 8 size? then after due trial we should have taken a No. 6, and then a No. 4, and so on increasing our delicateness of manipulation and our care in each decrease in size, lest perforation be effected and all the evils of a false passage result. With the small size, absolutely no force must be employed. Should we have failed in this, a flexible catheter would have been tried, or a bulb-pointed one, but it is never advisable to continue one sitting more than twenty or twenty-five minutes. At the end of that time, if unsuccessful, the patient should be put to bed with a warm hip-bath, a full anodyne injection, leeches to the perineum, and hot fomentations over the pubis, when in the course of a few hours the urine may commence to trickle through, and in a short time a full stream appear, provided the often neglected precaution be taken not to permit the cold air to chill him, by an attempt to rise and pass his water.

Should retention still continue, however, at the end of a few hours, and the symptoms be urgent, etherization may be tried and another attempt be made to enter the bladder. Failing again, a

skillful and experienced surgeon may perform forcible catheterization, or internal division; an inexperienced one should attempt neither, for it is but very rarely that any stricture is so tight as not to allow the trickling of a small stream through its aperture, at some time before the point of rupturing is reached by the bladder. Tapping of the bladder is an operation which I have never performed, having always been fortunate enough to relieve all patients by the means above proposed. Should it ever be necessary, however, it may be done with a curved trocar through the rectum, or by the delicate hypodermic-point puncture and suction of an "aspirator."

Should the retention be due to a swollen or congested mucous membrane, the same patience, gentleness and firmness will be effectual in gaining an entrance.

Should the case be an enlarged prostate, as so frequently happens in old persons, a flexible catheter may be necessary, or the "vertebrated" one of Squires or Sayre, assisted by a finger in the rectum to guide and lift the point. Of stricture itself I will speak more fully at a future time.—*Medical and Surgical Reporter, Philadelphia.*

THORACENTESIS.—Dr. Austin Flint, in an interesting "Report of twenty cases of thoracentesis" (*Archives of Scientific and Practical Medicine*, March, 1873), lays down the following rules of practice as regards the employment of thoracentesis.

1. Thoracentesis should be resorted to without hesitation or delay whenever an accumulation of liquid or air within the pleural cavity compromises respiration sufficiently to endanger life, or occasions extreme suffering from the want of breath. This rule of practice applies to serous effusion as well as to empyema, and also to cases of pneumo-hydrothorax. Lives are sometimes saved by the operation. Complete recovery may follow; but the palliation of suffering, under the circumstances stated, furnishes a sufficient indication.

2. Thoracentesis is indicated in cases of pleurisy with considerable serous effusion, although the respiratory function be not compromised sufficiently to occasion any dyspnoea when the patient is at rest, provided the effusion do not diminish speedily under treatment with diuretics, hydragogues, and blisters. It is far better to resort to the operation under these circumstances than to persist in the use of the measures just named. These measures are perturbatory, debilitating, and often slow in their operation in the cases in which they prove effectual, whereas the removal of the liquid by puncture of the chest is immediate; it does not enfeeble the patient, and occasions no constitutional disturbance. Moreover, thoracentesis, resorted to early, has this great advantage: it is likely to be followed by an easy and full expansion of the lung. The long-continued condensation of lung by the pressure of liquid, the investment of the lung by layers of lymph which become dense with age, and adhesions from newly formed tissue, are obstacles in the way of this result.

USE OF THE ASPIRATOR.

In the April number of the *Birmingham Medical Review*, Mr. Gilbert Smith, Resident Surgeon of the Queen's Hospital, reports the following cases illustrating the use of Dieulafoy's Aspirator, occurring in the practices of Messrs. West, Sampson, Gamgee, and Furneaux Jordan, Surgeons to the Hospital.

W. T., æt. 77, admitted May 15, 1872, under the care of Mr. Jordan, with an extravasal tumour in the lumbar region, ten inches in its longest and four inches in its shortest diameter, caused by falling backwards, during an attack of giddiness. The next day, the largest needle of the aspirator was passed, and five ounces of dark fluid blood were drawn away; pressure was maintained with a thick pad over the site of the puncture. He expressed himself quite relieved from pain immediately afterwards. Seven days later the pad was removed, and there was neither swelling, pain, nor the slightest constitutional disturbance. He left the hospital quite well, at the end of ten days.

J. B., æt. 45, fell backwards against a wheelbarrow, and was admitted to the hospital under the care of Mr. Gamgee, with a fluctuating swelling in the lumbar region, about the size of a cocoa-nut. The aspirator was used with the largest sized needle, and drew away about two ounces and a-half of dark fluid blood, afterwards pressure was applied with a pad. He would not remain an in-patient after the first day, but he came every other day as an out-patient. At the end of one week the pad was removed, and there was no appearance of the swelling.

J. L., æt. 10, fell a height of eight feet upon her head, and was admitted to the hospital, under the care of Mr. Gamgee, with an extravasal tumour of the scalp. The aspirator, with the largest needle, removed three and a-half ounces of dark fluid blood; firm pressure was applied. The relief was immediate, and she was quite well on the eighth day.

F. D., æt. 1¼, brought to the out-patient room of the Queen's Hospital, with a fluctuating swelling about the size of a hen's egg, and situated over the lower and outer side of the forehead, the result of a fall. The tumour was tapped with a simple trocar and canula, one-sixteenth of an inch in bore, and three-quarters of an ounce of dark fluid blood were evacuated. The extravasation being situated over bone, its evacuation was easily controlled by pressure.

M. O., æt. 13, was admitted under the care of Mr. West, senior surgeon, with a transverse fracture of the tibia, and a small prominent fluctuating tumour over the junction of the fragments. Circular compression was tried for a fortnight without avail; a medium-sized needle was passed, and three-quarters of an ounce of dark fluid blood were drawn away. Circular compression was continued, and there was no appearance of the tumour.

Mr. Gilbert Smith remarks on these cases that for many years various methods have been advocated for opening cavities containing fluid, that will combine complete evacuation of their contents with rapid closure of their walls, and with least fear of injurious results; such as limited and free incisions; evacuation with a simple trocar and canula, without any regard to atmospheric influence, and with the same instrument with ball and tube attached, or with a simple india-rubber tube fixed and carried under water to exclude air; Chassaignac's drainage tube, an admirable means of removing matter that tends to re-accumulate; and Lister's antiseptic method of opening abscesses. Dr. Georges Dieulafoy has recently constructed an apparatus called an aspirator. This consists of a powerful syringe provided with a tap, which may be turned in three directions; in one, which communicates with a nozzle on which any sized trocar may be fitted; in another, which communicates with the tube that empties the syringe; and in a third, which locks off all external communication. Whilst the tap is turned in this last direction a vacuum is made in the syringe by drawing the piston to the top of the cylinder, where it can be held fast by means of a notch cut in the length of the stem. This is a preliminary proceeding, and when the trocar is fixed to the end of the apparatus it is ready for use. Several sized tubular needles are used; the fine ones for diagnosis, and for emptying collections of fluid situated near delicate organs, the larger ones for diagnosing and emptying purulent collections situated in less dangerous localities. The trocar is now introduced in the direction of the fluid, the tap is turned in the long axis of the instrument, and when the fluid is reached it flows upwards into the exhausted cylinder. "With this instrument we are able," says Dr. Dieulafoy in his pamphlet, "to explore organs of the greatest susceptibility, to evacuate effusions from the pericardium, pleura, or abdomen, from the sac of the arachnoid, and from the cavities of joints." Its use is not wholly free from danger, since a few months ago a knee-joint was tapped with this instrument at a Dublin hospital, and the operation was followed by acute synovitis and death.

In not a single instance in the cases here described was there, after the evacuation of the fluid, the slightest constitutional disturbance, or reappearance of swelling; but the cure was rapid, and the relief from pain and discomfort immediate. As a contrast to the above method of treatment, I may mention the case of an old man who was admitted to this hospital with a large extravasal tumour of the back, from a fall; pressure alone was exercised over the swelling. The tumour became an abscess, and the patient died in six weeks from the effects of the constitutional disturbance.

In all similar cases to those enumerated the diagnosis is so simple as not to need further proof of the existence of blood, but if it were necessary to obtain further evidence, the grooved needle is all that is required. This little, simple and comparatively harmless instrument is not mentioned by Dr. Dieulafoy.—*The Doctor.*

NEW METHOD OF TREATING FUNCTIONAL DYSPEPSIA, ANÆMIA, AND CHLOROSIS.

[Dr. Brown-Sequard, in his new journal, *Archives of Scientific and Practical Medicine*, advises the following plan of treating the above diseases :]—The patient, instead of being restricted to three meals a day, is made to partake of small quantities of food sixty or more times during the day. He gives the history of a case of inveterate dyspepsia in a “scientific man 34 years of age, of strong constitution, but reduced, from several causes, to a lamentable state of health. For about eight years he had been working very hard, taking no exercise, and living almost all the time in a vitiated atmosphere. He slept very little, and usually passed eighteen and even nineteen hours a day writing, reading, and experimenting. His diet was miserable, and, with the object of avoiding the need of much food, he took a great deal of coffee. He gradually, though slowly, became exceedingly weak. His digestion, which had been very good all his life before he began to work so much, had gradually become very bad. He suffered greatly from pyrosis, and a feeling of great distress, and gastric distention after each meal. Acid eructations and gas were frequently thrown up into his mouth, and when he did not vomit, he found that his food remained in his stomach so long that, in the morning, he frequently ejected things eaten the previous day. * * * * His emaciation, and weakness and dyspeptic symptoms increased. * * * * He had to be carried in a litter to the railway station,” for the purpose of removing him to the country. The treatment adopted was to have the patient take two or three mouthfuls of solid food—chiefly bread and meat—every twelve or fifteen minutes, and a little less than a wine glass of Bordeaux wine and water every thirty or forty minutes. At the very outset of this treatment amelioration of the dyspeptic symptoms was obtained. This mode of alimentation was continued three weeks, when the frequency of administration of food was gradually diminished and the amount given each time slowly increased, until, in eight or ten days more, he ate only three full meals. “His strength during the first week had become almost as great as it ever had been previous to his illness.”

Dr. Brown-Sequard, in giving a summary of his plan of treatment, says it consists in giving “but very little of solid or fluid food, or any kind of drink at a time, and these at regular intervals of from ten to twenty or thirty minutes. All sorts of food may be taken in that way, but during the short period when such a trial is made, it is obvious that the fancies of the patient are to be laid aside, and that nourishing food, such as roasted or boiled meat, and especially beef and mutton, eggs, and well-baked bread, and milk, with butter and cheese, and a very moderate quantity of vegetables and fruit, ought to constitute the dietary of the patients we try to relieve. This plan

should be pursued two or three weeks, after which the patient should gradually return to the ordinary system of eating three times a day." He says further: "My experience with the patients on whom I have tried the plan of feeding above mentioned, shows that the amount of solid food required by the adult is nearly always as follows: from 12 to 18 ounces of cooked meat, and from 18 to 24 ounces of bread. As regards the quantity of fluid I have allowed, it has been notably less than the amount indicated by Dr. Dalton (3 pints) and by Dr. E. Smith ($4\frac{1}{2}$ to 5 pints)."

He says that in carrying out his plan of treatment, three points need attending to: 1st. The liking and disliking of certain things by the patient; 2nd. The importance of variety of food; 3rd. The digestibility of certain things compared with others, which varies immensely in different patients. When the patient becomes disgusted with any particular form or kind of food, it must be changed or abandoned at once. The patient should be allowed to select that food which to him is most agreeable, only keeping within certain reasonable limits of proper articles. This plan is mostly in harmony with the natural requirements of animals. Nature has adapted the instincts of all animals to the most preservative conditions on which life and health are correlated. In infancy we find that all animals (including man) take food in small quantities and frequently repeated. We adopt the same method while treating those patients who are sick with fevers and other debilitating diseases. Therefore, when a man is sick, we go back to first principles. [There is no doubt but that the plan of Dr. Brown-Sequard is admirably adapted to the treatment of very many disorders, and is far preferable to the abominable system of drugging patients who need hygiene rather than medicine to cure them.]—*Med. Arch.*

CETHIOPS MINERAL IN CHOLERA.

BY H. H. CROFT, PROFESSOR OF CHEMISTRY, UNIVERSITY COLLEGE,
TORONTO.

A pamphlet has lately come to hand, on the above subject, a few words concerning which may not be out of place. M. Socrati Cadet, of the Royal University of Rome, publishes an account of the use of the above medicine during the epidemic of cholera in Italy in 1865-67, and from his statistics it appears that in cases treated without the sulphide, the cures were from 25 to 40 per cent, but under the employment of it, in doses amounting to as much as 72 grains per diem, the cures were from 60 to 100 per cent.

He ascribes its efficacy to its influence in destroying parasitic growths, to which many persons ascribe this terrible epidemic. This action of cæthiops was noticed many years ago by Vallisnieri.

How this preparation can act so powerfully, unless from the excess of sulphur it contains, does not seem chemically, very clear. As is well known it is prepared by rubbing or shaking equal parts of flowers of sulphur and mercury until the metallic globules completely disappear. The mercury combines chemically with the sulphur as may be proved by the fact that nitric acid extracts no mercury, and the sulphur can be dissolved out by carbon disulphide, leaving the black mercuric sulphide, which is insoluble in all acids except the nitro-hydrochloric.

It is well known also, that potassium sulphide was at one time recommended as an antidote for corrosive sublimate, its action being to convert the active chloride into inert sulphide. M. Cadet remarks in one place that the medicine is so innocuous, that it may be given to a person not suffering from cholera, without any ill effect resulting.

Possibly the large quantity of free sulphur contained in the *æthiops* may have had something to do with M. Cadet's success and that of several other practitioners who confirm his statements; at any rate it may be well to call attention to this remedy in view of the probable advent of cholera on this side of the Atlantic, in the course of a year or two.—*Pharmaceutical Journal, Toronto.*

AN IMPROVED MEANS OF PLUGGING THE POSTERIOR NARES.

BY A. GODRICH, M. A., M. R. C. S.

I beg to submit to professional notice an instrument that I had constructed by Messrs. Louis Blaise & Co., of 67 St. James' Street, for plugging the anterior and posterior nares in cases of epistaxis. I have long been struck by the unsatisfactory means at our disposal in dealing with such cases. There is, in the first place, owing to its large curve, no little difficulty in passing Bellocq's sound, the point of the instrument often hitching on the posterior edge of the floor of the nasal fossa. In the next place, the adjustment of the posterior plug, requiring, as it does, the passage of the surgeon's finger into the fauces, not only causes much distress to the patient, but often entails a more or less severe bite on the operator, as I have found to my cost; and lastly, when the plug is in position, the string passing from it through the mouth causes so much irritation of the soft palate and fauces, that but few patients have the courage to submit to it.

The instrument consists of a small elastic bag stretched on the end of a hollow style, by means of which it is pushed through the nasal fossa into the pharynx. It is then dilated with ice-cold water by means of the ordinary ear-syringe, the nozzle of which is inserted

into a piece of India-rubber tubing tied to the other end of the style. A small piece of thread or twine tied round this prevents the water from escaping. The bag, thus dilated, is now to be drawn well forward into the posterior nares, into which, by its elasticity, it will accurately fit. The anterior India-rubber plug is next to be slid along the style (this is more easily done if the style be previously wetted) into the anterior nares, which it fits like a cork. The cohesion between this plug and the style will, I think, be sufficient to hold both plugs in position; if not, a piece of string tied round the style in front of the anterior plug will ensure perfect security.

When it is necessary to remove the plug, all that the surgeon has to do is to cut the string tied round the piece of India-rubber tubing, when the water will be expelled by the elasticity of the bag, and the instrument may be removed without difficulty.

This instrument even at its thickest end, where the elastic bag is stretched over the style, is not larger than a No. 6 catheter; and it can consequently be passed through the nasal fossa without the least difficulty, and with very little discomfort to the patient, as I have proved by frequently passing it through my own nose. The style being made of elastic material—in fact, a gum-elastic catheter, and therefore capable of being bent to any curve required—also facilitates the introduction of the instrument. When once the instrument is in position, and quiet, it is almost impossible to tell by the sensations alone that there is any foreign body in the nasal fossa at all; the dilatation of the bag causing but little discomfort, being above the sensitive palate and fauces.

In designing this instrument, it has been my object to combine simplicity and cheapness with perfect efficiency. If I have not fully accomplished my object, I ask any one to suggest any alterations that may bring this instrument nearer to perfection, and enable us to do away with our present barbarous and unsatisfactory plan of plugging the nares.—*British Med. Journal.*

TEST FOR SEWAGE IN WATER.—At a recent meeting of the Royal Dublin Society, Dr. Reynolds called attention to Heisch's test for detecting sewage contamination. It is one of the best known but has been strangely neglected. About half a pint of the water to be examined should be placed in a colorless, glass-stoppered bottle, and a few grains of the best loaf sugar added. The bottle should then be placed in a position where it will be directly exposed to the rays of the sun. The liquid should not become turbid, even after a week or ten day's exposure. If there is a perceptible cloudiness, sewage contamination may be strongly suspected. Frankland has stated that this turbidity is due to phosphoric acid present in sewage and it has also been suggested that it is due to fungoid growths.

RUSSELL ON THE DIFFUSION OF ENTERIC FEVER
BY MILK.*

We beg to direct the attention of our readers, and especially to such as are specially interested in sanitary matters, to a very noteworthy report furnished recently on this subject by the medical officer of health for the city of Glasgow—Dr. James B. Russell. In this report it is proved, we might almost say to demonstration, that a localized outbreak of typhoid fever, in one of the suburban villages of Glasgow, was due to the existence, in the family of a dairyman, of a case or cases of this disease, and the contamination thereby of the milk served by the dairyman to his customers. It may be worth while to give a brief sketch of the circumstances of the case, and of the facts which point so strongly to this conclusion. The village of Parkhead, although closely adjoining some of the most crowded parts of Glasgow, retains the character of a country village. The water supply is good, and nothing suspicious could be discovered about the sewerage. In this village an epidemic of typhoid fever broke out in January, and, after lasting about a month, seems to have disappeared. Thus, in December, 1872, there were three known cases of typhoid fever; in January, 1873, there were fifty-three new cases in thirty-nine families; and in February only two new cases were known. Investigation of these cases in January showed that the epidemic had a very definite relation to the supply of milk by one of the dairymen in the district. Of the three cases in December, 1872, one was in the family of this dairyman; and of the families attacked in January, 1873, the large proportion had their milk supply from him. Thus, of the thirty-nine families attacked, thirty two were so supplied, and these families gave forty-six cases of fever, while only seven families were supplied by others, and they only gave seven cases. This is rendered all the more striking from the fact that only about a seventh of the families in the district were supplied by the dairyman in question, so that the relation of the cases to this source could be no mere accidental one. A still more accurate test than this was resorted to. The epidemic was concentrated in five streets of the village—twenty-four of the thirty-nine families attacked residing in these streets; and it was resolved to take, as it were, a milk-census of these streets. From this it appeared that in these streets the dairymen in question supplied seventy-three families, and of these twenty-two had fever; and that other dairymen supplied a hundred and forty-six families, and only two had fever. There could certainly be no more definite proof than this. One or two other points of corroborative evidence are brought forward at the close of the report, one of which is perhaps

* Glasgow Herald; Medical Times and Gazette; and British Medical Journal, March 15.

worthy of special notice. In two families supplied by the dairyman in question, it was stated that the two individuals seized were the only members of the family who used the milk. In both cases it was used with porridge, while the other members took sour milk or syrup. In connection with these facts, the report makes some remarks on the system, which obtains to a considerable extent in Glasgow, of having dwelling-houses in immediate connection with shops for the sale of provisions; and the medical officer indicates that the department has received instruction to make all such places the subject of frequent visitation. Any cases of infectious diseases will be at once reported and dealt with.—*London Medical Record.*

PROF. KNOX AND TEXT-BOOKS ON ANATOMY.—Perhaps the most eminent teacher of anatomy in Edinburgh, or in Britain, early in this century, was Dr. Robert Knox. He was a man abounding in anything but the milk of human kindness toward his professional brethren, and if people had cared in those days to go to law about libels, it is to be feared Knox would have been rarely out of a court of law. Personality and satirical allusions were ever at his tongue's end. After attracting immense classes, his career came very suddenly to a close. I need scarcely refer to the atrocious murders which two miscreants, named Burke and Hare, carried on for some time to supply the dissecting-rooms with "subjects." They were finally discovered, and one of them executed, the other turning king's evidence. Knox's name got mixed up with the case, being supposed to be privy to these murders, though many considered him innocent. The populace, however, were of a different opinion. Knox's house was mobbed, and though he braved it out, he never afterward succeeded in regaining popular esteem. He was a splendid lecturer, and a man who, amid all his self-conceit and malice, could occasionally say a bitingly witty thing. It is usual with lecturers at their opening lecture to recommend text-books, and accordingly Knox would commence something as follows: "Gentlemen, there are no text-books I can recommend. I wrote one myself, but it is poor stuff. I can't recommend it. The man who knows most about a subject writes worst on it. If you want a good text-book on any subject, recommend me to the man who knows nothing earthly about the subject. (That was the reason that Dr. T. was asked to write the article, 'Physical Geography,' for the 'Encyclopædia Britannica.') The result is that we have no good text-book on anatomy. We will have soon, however; Professor Monro is going to write one." That was the finale, and, of course, brought down the house, when, with a sinister expression of his face, partly due to long sarcasm and partly to the loss of an eye, he would bow himself out of the lecture-room.—*All the Year Round.—Medical and Surgical Reporter.*

ON BRIGHT'S DISEASE.

In a lecture by Sir William Gull, in *The Doctor*, he says :—

Of this affection there were two cases in the ward, which afford a good illustration of some of its phenomena. One of them is a girl, æt. 18, who has been exposed to wet and cold, which has brought on an attack of acute catarrhal albuminuria. The kidney is like the lungs in this, that it is liable to catarrh ; and women are more liable to it than men, their circulation altogether being more easily disturbed, and in this case there is constitutionally a greater tendency ; her father died of consumption. Three weeks before admission she got her feet wet, and went about in her boots all day ; the next day she felt languid, then she vomited, and soon began to swell all over. The urine was scanty, and on being examined it was found to contain albumen, with epithelium cells, and casts of the tubes. She is slowly improving, but only very slowly, for perhaps of all organs of the body the kidney is one of the slowest in recovering.

There are two or three interesting things in this patient. One is that as you have seen, there are lines across her abdomen, just like those which result from child-bearing, and if you were not aware of their true nature, they would be almost sure to give rise to suspicion. But there is in fact no reason to believe that these lines are due to distention at all. We may, I think, be quite satisfied there has been no pregnancy in this case. She says, and there is every reason for believing her, that she has always been regular since she first began at the age of 16 ; and these lines, "*Linix erandarum spurix*" we may call them, forms as a result of a kind of atrophy of the skin, a spontaneous atrophy, so far as we can trace. Here is a model of them on the knee of a boy, and here another on the forehead of a child. In respect to the morbid conditions of the kidney it should be borne in mind that the kidney is, of all the organs in the body, perhaps the most vascular. Certainly, if we consider the rapidity of the circulation in it, it is so ; if we consider the large arteries, and the peculiar arrangement of the malphigian bodies, it is an arterial gland. The spleen, perhaps is, in one sense, more vascular, it is more a mass of vessels, but vastly more blood circulates through the kidney, and thus it becomes liable to throw off albumen under various circumstances ; in weakness after fever, in attacks of cold, in little alterations of the blood from indigestion, or from over-fatigue. In fact, any disturbance of the circulation or of the digestion may bring it on, so it may be a symptom only of these slight disturbances, and may recover in a few days, or may continue year after year without becoming worse. In case of this kind the albumen is present, especially after meals. But the case of this girl is not one of this kind ; it is due to some anatomical changes in the kidneys. We know this, because she has anasarca, which is a sign of it. In fact, she has catarrhal Bright's disease.

Bright's disease, which is real structural disease of the kidney, is of three kinds. We might illustrate it and its relations to albuminuria by inscribing a small circle within a large one, and then subdividing the former; thus albuminuria is the large circle; that comprises all cases in which albumen is present in the urine, and it lies quite outside of Bright's disease. That is confined to cases of anatomical change in the kidney itself; and the three kinds of it are these that I will write:—

1. The catarrhal. 2. The gouty. 3. The cachectic. It is true the gouty might be said to be only a form of the cachectic; but there is a real difference in the disease which justifies the distinction. In the gouty form of Bright's disease the kidney is contracted and small, and there is no anasarca. In the cachectic form, which is connected with syphilis, with albuminoid degenerations and phthisis, the kidney is large and waxy.

In the catarrhal the kidney is large and swollen, the epithelium becomes fatty, anasarca takes place rapidly, it is what is called "acute dropsy." The people become languid and we can smell their breath that there is urine in it.

The gouty kidney is met with chiefly in the upper classes; the catarrhal rather in the lower, who suffer from exposure and cold; there is no anasarca; the patients are pallid, they have headache, they pass little urine of low specific gravity. It is easily overlooked, but appears at once when we examine the urine. It is indicated, too, by the aspect of the face, and the breath, and by the pulse.

This last is hard, because probably from resistance to the circulation in the minute vessels the left ventricle is enlarged.

In the cachectic form of Bright's disease, there is albuminoid deposit in the kidneys. It comes in syphilitic children, and in the consumptive; and the kidney, as I have said, is the seat of waxy degeneration; it undergoes an amyloid change, in which the blood-vessels are largely concerned. The other glands, too, are generally enlarged. In this form also there is much dropsy. Here the affection of the kidney forms only a part of the general cachexia; it is but a fraction, and we might almost say an insignificant fraction, of the disease; in the catarrhal form it is the main disease; in the gouty it is a chief part.

These are the three great varieties of Bright's disease. The girl whose case we have been speaking of presents the catarrhal form, due directly to exposure. There is another case of it also in the wards, a man in whom it has come on after small-pox. It is essentially the same form of the disease, though different in its origin. It is a frequent sequel of fevers, and of various kinds of them. But you must carefully distinguish Bright's disease from albuminuria. Nothing could be more false than the formula, albuminuria—Bright's disease. And if it should get into your minds, see that you entirely banish it. Albuminuria may be a mere transient disorder of circu-

lation or assimilation ; Bright's disease is a structural perversion of the kidney. And let me add one thing more. The important element, as concerns the health, even in Bright's disease, is not the presence of the albumen ; it is the absence of the proper urine. It is the failure of the kidney to discharge its function of elimination ; not its suffering to escape a little of the pabulum of the blood. This loss is doubtless an evil, though the cases are probably few in which it would be a very serious one, if it stood alone ; the great damage is done by the retention in the blood of the urea and other excreta. So the instrument by which to measure the gravity of the disease is not the lamp and nitric acid, but this, the test for the specific gravity.

TURPENTINE IN HEMORRHAGE FROM THE BOWELS.—Dr. S. Wood, of Clyde, New York, in an article in the *Buffalo Medical and Surgical Journal*, August, 1872, advocates the use of oil of *Turpentine* alone in large doses for the control of hemorrhage of the bowels, occurring as a complication of typhoid fever.

Case in illustration.—In the evening of the second day of the month of September, 1852, I was requested to visit W——, a boy of sixteen years, with typhoid fever, some two and a half miles distant, and who had been under the care of another practitioner some two or more weeks. I was told that the case was one of great urgency, since an unfavorable prognosis had been given. On arriving at the bedside, I was informed that blood in large quantities was passing from his bowels at each frequent evacuation. Found patient exceedingly restless from pain and tympanic distension of the bowels. Skin dry and burning ; pulse extremely rapid and thready ; tongue dry, clean, and with dark papilla, with sordes on the teeth and lips. The prognosis indeed seemed most unfavorable.

In being called upon to prescribe in an emergency of this kind, there was an imperative demand for immediate and decisive action. What was to be done should be done quickly. Not a moment was to be lost. In running rapidly through my mind the various styptic remedies of the *Materia Medica*, suitable to the case before me, I happened to recollect an article first published in the *Medical Times*, August 17, 1850, from the pen of Dr. Wm. Budd, physician to the Bristol Infirmary, on the “styptic properties of oil of *Turpentine* in a case of purpura hemorrhagica,” and also another article in *Braithwaite's Retrospect* for January, 1851, by John Griffith, Esq., Wexham, on the use of *Turpentine* in large doses, in uterine hemorrhage ; and from the high praise given this remedy by these medical gentlemen, I at one resolved to give it a trial. Some was procured from a near neighbor, and, without delay, I administered a teaspoonful in some sugar and water, and in fifteen minutes as much more. After the expiration of an hour I gave half the quantity in the same

manner, and then ordered that in two hours twenty drops should be given, and so on every two hours until I should see the patient again the following morning.

Sept. 3.—Symptoms much improved; pulse slower and fuller; less heat of surface with a tendency to perspiration; expression of countenance less anxious; and, from the character of the stools, was fully convinced that the *Turpentine* had controlled the hemorrhage almost immediately after the first dose had been taken. For the next twenty four hours I ordered the remedy to be given in twenty-drop doses every four hours.

Sept. 4.—Patient still improving; symptoms all better; no more hemorrhage; but the *Turpentine* was so obnoxious that I reluctantly discontinued its further use until I should see him again, and substituted a tonic in its stead.

Sept. 5.—Hemorrhage had returned with symptoms of a very threatening character. I now prescribed the *Turpentine* again, to be given in twenty-drop doses, as first, every two hours for three or four doses, depending upon symptoms, and then every four hours until I should see him the next day.

Without extending the report of this case further, I will briefly state that I continued the remedy some three or four days. At the expiration of this time convalescence was fully established, and without further drawback went on rapidly to complete recovery, there being no more hemorrhage.

INSANITY.—[The following is an extract from a lecture by Dr. C. B. Radcliffe, in the *British Medical Journal* for April 5:]

“That state of mind to which is given the name of melancholy is so common among lunatics, that melancholy and insanity have been used as mutually convertible terms. The anatomy of melancholy, to go no further, is a treatise on insanity. In some cases, of course, this state of mind is not so obvious as in others, and it may be difficult to detect it if the patient be reticent. In the more aggravated cases there is no such difficulty, the patient often sitting hour after hour, or day after day, motionless, with clasped hands and woe-begone features, or else, driven past endurance by feelings of anguish and despair, continually moving about, moaning or wailing, wringing his hands, praying for death, or even seeking it, too often successfully, at his own hands. As a rule, this state of mind would seem to be the very reverse of that which shows itself in inordinate self-esteem, the patient often believing himself to be thoroughly bad and wicked in every way, with a dreadful doom in store for him both here and hereafter. And the more marked delusions in association with melancholy are in conformity with this idea. I know, for example, a miserable man, long a victim to deep melancholy without

delusion, whose delusion now is that he is a murderer, condemned and left for immediate execution, who will not look out of window lest he should see the gallows, and who, whenever the handle of his door turns, expects the executioner. And the cases are legion of those who think that they have committed the unpardonable sin, for which their inevitable doom is everlasting destruction. It would also seem that this terrible self-depreciation may lead to another kind of delusion, the very opposite of that to which inordinate self-esteem would seem to lead in some cases,—namely, to a loss of personal identity, in which the idea of self is lost, as it is lost in lycanthropy. At all events, I know of one case in which there were true fits of lycanthropy, or rather cynanthropy, where the settled melancholy, which was the predominant state between the fits, had its origin in what may be spoken of as the *worm-doctrine* of human nature, and in the miserable forebodings as to the future to which it led. But, be the relation of this, or any form of delusion, to melancholy what it may, the facts remain not only that melancholy is a morbid feature in insanity, but that melancholy, more or less deep, without delusion, must have assigned to it a very prominent position among the symptoms of incipient insanity.

“There are, no doubt, many variations and combinations in the symptoms of incipient insanity. Sometimes one or two of the symptoms only are present, to the exclusion of the rest. If all are present,—an almost inconceivable case,—then there would be a state of intense self-conceit without actual delusion; a state of moroseness and misanthropy without actual delusion; a state marked by great mistrust and suspicion, without actual delusion; a state of uncontrollable impulsiveness without actual delusion; a state of melancholy without actual delusion; a warped state of the intellect without actual delusion, irregularity of fancy showing itself in illusions and hallucinations; and, lastly, a tendency to delirious excitement. In actual insanity one or more of these several morbid mental conditions is always present, the change which has happened consisting only in the addition of some actual delusion, which delusion very often, to say the least, may be looked upon as the natural result of the exaggeration of the morbid mental condition most closely associated with it.”

CLINICAL LECTURE ON OVARIAN CYST.

BY T. GAILLARD THOMAS, M.D., NEW YORK.

The first case, gentlemen, which I show you to-day is in the person of Miss S——, æt. 23, born in the United States, and single. She says she has been sick during the last year. The chief symptoms from which she has suffered are pain in the side, pain in

the back, and pain down the thighs. She has also had a burning pain in the left inguinal region; suffered from general debility, vomiting, palpitation of the heart, and pain in the head. She has been perfectly regular with regard to her monthly periods. Previous to last year she was in ordinary health, although always delicate; but thinks that within the past year she has emaciated a very little. There is one other symptom which the patient neglects to give us, and which is decidedly important, namely, the presence in the abdominal cavity of a large tumor. This enlargement of the abdomen was first noticed in the early part of last year, and now it has advanced to such an extent that it is the source of great discomfort.

Physical Examination.—The first thing that meets our eye, as the abdomen is exposed, is the presence of a large protuberant mass filling the abdominal cavity generally and symmetrically. The next step to be taken in the consideration of the case is to determine, if possible, what the nature of this mass is; whether it is the cause of the symptoms of which the patient complains, and whether it is concerned in the diagnosis or not. When you approach such a case as this, it is always well to run over in your mind the pathological states which may give rise to such a condition as we have here. This is important, not only in this case, but whenever you approach a diagnosis at all, it is well to inquire what are the causes that may give rise to the existing condition, whatever that may be.

For example, when you are called upon to visit a case of supposed ordinary colic, do not give a dose of opium simply, without determining, if possible, what the pain may be dependent upon, for it may be produced by the passage of a gall-stone; and in that case your diagnosis would not be ordinary colic, but passage of a gall-stone, the term colic expressing but a single symptom.

These remarks apply particularly to the study of abdominal tumors of the female, because it is one of the most intricate subjects you will have to deal with in the whole department of gynæcological science. In connection with this class of diseases, very many mistakes are made, and often made by pure carelessness upon the part of physicians who have them under observation. Even to-day, coming in contact as I do almost daily with this class of diseases, I find that the only method of examination which gives me a fair chance of avoiding errors in diagnosis, is first to go over every case in the same manner as I shall go over this case with you. Let us therefore inquire what are the conditions that may cause enlargement of the abdomen in any case.

(1.) The first cause which we will mention is *tympanites*. In a hysterical woman an immense amount of air will sometimes collect in the intestinal canal. These are the cases in which we have those phantom tumors, by which many a man has been deceived. So great

has been the deception and mistake in these cases that experienced operators have cut into the abdominal cavity with the unfortunate result of giving ocular demonstration of the presence of a gaseous collection, instead of the presence of an ovarian tumor.

(2.) Ascites may produce an enlargement of the abdomen, and this woman may have cirrhosis of the liver, which has given rise to such an accumulation of fluid.

(3.) Utero-gestation may cause such an enlargement, and there are several reasons for suspecting that this is the cause in the present case. All the gastric symptoms of which she complains could be very easily explained by that condition, and the general depreciation of strength might depend upon the mental state easily induced in an unmarried girl under the apprehension that she was pregnant.

(4.) It may be a uterine fibroid, which has been growing for a year, and such a tumor would produce very much the same symptoms as we have present in this case.

(5.) It may be a solid ovarian tumor; and, *lastly*, it may be an ovarian cyst or dropsy.

There are a few other conditions which might cause enlargement of the abdomen, such as cancerous affection of a portion of the omentum, hydatids of the liver, etc.; but such cases are so rare that I deem it hardly necessary to mention them in connection with this case. Ordinary enlargement of the liver and spleen could hardly lead into error, if existing alone; but they might do so if they existed in connection with ascites. What we wish to study now, however, is the conditions which might produce just this kind of protuberant, symmetrical enlargement of the abdomen, and ordinary enlargement of the spleen and liver do not do this.

Let us now return and consider, *seriatim*, the causes which have been written upon the blackboard.

(1.) If this tumor is due to tympanites we shall obtain a resonant sound upon percussion. The percussion note in this case is dull. An additional precaution, however, is necessary; for in those phantom tumors of which I spoke a few moments ago there is sometimes such a rigidity of the muscles, produced by contraction, that the resonance upon percussion can scarcely be obtained. Under such circumstances the administration of an anæsthetic will dissolve the tumor and your diagnosis will be made at once.

(2.) If this is due to ascites, depending upon cirrhosis of the liver, the liver will be diminished in size, the intestines will be upon the surface of the fluid, and there will be resonance upon percussion over the surface of the tumor, above the level of the fluid. We have, however, just determined that there is dulness over the surface of this tumor upon percussion. Again, if this were ascites, we could, by palpation, get the sensation of a wave communicated to the hand through the abdominal walls; but nothing of this kind can be obtained here. The age and appearance of the woman are both

against cirrhosis, the liver is not diminished in size (this being in a great majority of cases the cause of ascites), and we may therefore safely exclude that cause for this enlargement-

(3.) We can exclude utero-gestation in this case at once, for the following reasons :—The uterus is of normal size, and there are no signs whatever of the presence of a foetus upon auscultation. Many a practitioner has made an error upon this point of differentiation simply because he has not taken sufficient care in making out his diagnosis, and the result of such an error you can easily appreciate. There is one way to determine whether utero-gestation is present or not in such a case as this, which is very simple and very satisfactory. Dip the hands in ice-cold water, and immediately lay them upon the surface of the abdomen, and within a period of time varying from five to thirty minutes your senses will convince you, unless life has become extinct in the foetus.

(4.) This tumor is not a uterine-fibroid, because it is not solid. You determine whether it is solid or not in just the same way you would determine whether any inanimate object is solid or not—rely upon your senses. Perhaps, however, you may be a little in doubt, and if you are, do what has been done in the case before us now; tap the tumor with an ordinary hypodermic syringe, and draw out some of the fluid, if any fluid is present. The operation is almost painless, is harmless, and is a most excellent adjuvant in making out a diagnosis. In this case we have drawn out a clear fluid, like Croton water, and we may safely exclude the uterine-fibroid.

(5.) This tumor is not a solid tumor of the ovary, because it has just been determined that it contained fluid. In the manner in which we have proceeded with our investigation, it will be seen that the only cause left which would produce such an enlargement of the abdomen as we have here, is ovarian cyst, or dropsy. With proper care in examination, it could hardly be possible to make errors in diagnosis with regard to enlargements of the liver and spleen, even though they may be associated with ascites; yet they may lead into error, and so will the conditions which have been mentioned as probable causes, when proper care is not taken. This tumor is probably not due to hydatids, because the character of the fluid obtained by tapping is not that of a hydatid cyst.

Her appearance clearly indicates that she has no malignant disease.

We come now to look for the positive signs that we have to deal with in a case of ovarian dropsy.

There are no intestines over this tumor, because the ovarian tumor rises up and pushes them away. The resonance therefore will be obtained upon the sides of the tumor.

The fluid drawn is another reason for believing it to be an ovarian cyst, and that makes the diagnosis complete.

Prognosis.—From 6 to 8 out of 10 such cases as this are cured.

This proposition, however, represents no man's experience in connection with ovarian tumors, unless he has had this class of cases to deal with exclusively. The favorableness of prognosis in this case is based upon the rapidity of its growth, the clear water-like contents, and the trifling effect that it has had upon the patient's general health.

The treatment is summed up in one word, and that is ovariectomy. Paracentesis is not advisable, for a large number die as a result of the operation. When an ovarian cyst is tapped, two openings are made, one through the peritoneum and the other through the walls of the cyst; the result of that is that some of the fluid may, and probably will, flow out of the cyst into the peritoneal cavity, and give rise to peritonitis or septicæmia. It is the formation of this *double opening* that constitutes the essential difference between the tapping of an ovarian cyst, and tapping for the removal of fluid accumulated in the abdominal cavity from other causes.

This, gentlemen, is the method I pursue in the examination of every case of abdominal tumor I am called upon to examine, and I believe you will find it of practical service in your future careers.—*Am. Journal of Obstetrics.*

HYDRO-THERAPEUTICS AND LOCAL WITHDRAWAL OF HEAT.

DR. RIEGEL (*All. Vien. Med. Ztg.*), mentions that Dr. Brand has for some years treated typhus fever by cold water procedures consisting of tepid baths occasionally, and in the intervals between them by the application of cold compresses on the chest and abdomen. As an advantage derived from this mode of treatment the author mentions that in this case there is not the excessive change in temperature observed in the sole application of very cold baths, and that there are not so many cold baths needed. The author has also showed that the effect of this much milder experiment can at any rate be made equal with those when cold baths of a far lower temperature are used.

Further experiments concerning the value and feasibility of the local application of cold which was carried out by Dr. Rosenberger, show that it is possible always by means of cold compresses or bladders of ice to lower the temperature of a high fever. It was observed that the magnitude of the effect in lowering the temperature increased with the cold applied and the extent of surface submitted to it; but it was also found that by means of similar local withdrawal of heat the temperature of a healthy person could be brought below the normal, and finally at least in the later periods of the application of cold, the temperatures thus attained are alike in similar spaces of

time. From all of these experiments it was at least proved that the frequently repeated assertions that the local application of cold was of no special effect in lowering temperature, were not founded on observations of Nature.

There had, however, been as yet no experiments made over long periods of time, and thus it was not conclusively ascertained whether the effect might not become less in a longer period of time. The author, therefore, made a series of experiments so arranged that he applied continuously ice-bladders on the breast and abdomen, and made observations every hour upon the temperature in the rectum and the axilla. Only typhus cases were experimented on, and comparative experiments were made with them by placing ice-bladders on the chest during one day and treating the patients by cold baths on the other days.

In a former place the author had put it as a notable disadvantage of the treatment by baths, that the temperature of the body in a very short time undergoes excessive extremes. The patient who has a temperature of 40° C. in the rectum, in half an hour will be submitted to a temperature of 15° R., or still lower; and the temperature of the rectum will go down to 38° C. In less than an hour the temperature will have again risen to 40° C. and will again be suddenly lowered to rise again suddenly. It results from this, that in the worst cases of fevers such a patient may undergo twelve baths in twenty-four hours.

Whether such a repeatedly rapid change in the temperature of the body be without danger or not the author leaves unanswered, but he puts the query whether the more frequent recent occurrence of hæmorrhage from the intestines in typhus may not be owing to this cause on account of the excessively cold baths sending the blood suddenly from the surface of the body towards the internal organs. Besides, this treatment is not sufficient in cases of very severe typhus fever, since the baths are at most only used once every two hours.

When in very severe cases of typhus the temperature is measured every hour or every half hour, we come soon to be convinced that the temperature gets to its height in less than an hour after the bath, and it is hardly possible to carry out the practice of hourly bathing either in hospitals or in private practice, even were the patient willing to get into a bath every hour. Even in the best hospitals much difficulty would be found in carrying out such a plan; but in private practice it were out of the question to speak of it.

Again, in many cases of typhus fever, the temperature does not get high enough to indicate the use of a bath; and yet the mean daily temperature may be much above the normal. And yet it is by no means indifferent to the organism that a fever even with a moderate heat should exist for a long time. Bathing typhus patients is very difficult to carry out among persons of moderate means in private practice. It has consequently frequently been attempted to use

cold applications which are so much more readily attainable, and to see whether similar or equal results could not be obtained from them. But the trials were not sufficient, until recently, to determine this point. Dr. Leube used ice-pillows, but these were not found to suffice, and the substances mixed with the ice to produce a low temperature were apt to cause unpleasant consequences from the too great cold produced.

The author's early attempts with local withdrawal of heat by means of ice-bladders had shown an unexpected fall of temperature, and this circumstance made him think that the whole effect of such local applications must be great in twelve or twenty-four hours. Besides, the danger which exists at the moment of a temperature of 41° 42° , we have to thank the hydro-therapeutic method of treatment because it has the power of lowering the average temperature in the twenty-four hours. It is important to accomplish the end in as simple a manner as possible. And if an ice-bladder laid along the chest, &c., can accomplish this in twenty-four hours as well, it is evidently preferable to the system of cold baths. The author has instituted a series of experiments, and arrives at the conclusion that the effect of ice-bladders in the whole time of experiment never is less than that of ordinary treatment by cold baths. In two series of cases with very young patients, indeed, there was quite a marked advantage in favour of the ice-bladder, and on the day in which ten baths were used the mean temperature in the rectum was 39.69° C., and in the 39.18° C., whilst on the days in which only two ice-bladders were applied one on the thorax, the other on the abdomen, the mean temperature in the rectum was but 37.34° C., and in the axilla, 37.49° C. This plan of ice-bladders has, therefore, much to be said for it in private practice.

In the majority of cases no artificial mixtures such as those used by Leube are required. A great advantage in this plan consists in the economy of labour which results from it, since the change of the ice-bladders is only required after several hours. Even then patients who shun water most become easily persuaded to allow one or more ice-bladders to be laid on the body; whilst on the other hand, there are many patients who can with the very greatest difficulty be persuaded to take a cold bath. The rather too much urged idea that the use of the ice-bladder keeps the patient too much in the horizontal position is not of much weight. The patient can lie on the side and the ice-bladder can be perfectly well applied; but the great advantage of the plan is, that it can be used even when the temperature of the body is not excessive. Thus, whilst in very severe cases, this method may be described as not being able to combat the high temperature, in ordinary cases and in private practice it has numerous advantages.

The author's ice-bladders are so made as to lie quite close to and along the body, and cover the abdomen and chest completely.

If the periphery of the body be less covered the lowering of the temperature is notably less ; and this rises with the superficies covered by the ice-bladders. From time to time the bladder is to be opened and the air contained in it let out ; neglect of this precaution makes the bladder not lie so closely to the body.—*The Doctor.*

MEDICAL ELECTRICITY.

From nearly all Medical induction coils two currents are obtained, one called the primary or extra current, and the other the secondary. The first is taken by branch wires from the first or inducing coil of the helix, and is merely the battery current broken by the rheotome, and intensified by the inductive action of the coils on each other. The other is the induced current proper, and is taken from the outer coil, which has no connection with the battery. And inasmuch as the duration of an induced current is only momentary, namely, upon the making and breaking of the inducing current, a rheotome or current-breaker is always introduced into the primary circuit, so that the current as felt is always a series of shocks. With the quantity current battery, however, and a properly constructed helix, these shocks are not painful. You will thus recognise the difference between the current as it should be and the one obtained from most of the small portable batteries, put up and sold for Medical use, invariably as the best in the market, but which are so objectionable from their small quantity and fierce biting intensity of their currents, that they should be banished from Medical use, except in a minority of cases.

As we said of the galvanic current, that it acted primarily and powerfully upon the nervous system, so we may say of the induced, that, whether we use the primary or secondary current, its most noticeable effect is upon the muscular system. This is owing to the fact that every time a current of electricity is passed through a muscle it causes it to contract, and as the faradaic is a constant succession of currents, there is a succession of contractions, which, if sufficiently rapidly produced, may amount to spasm. The ordinary method of applying this current is by means of sponges to various parts of the body ; and it is a very efficient way, but far exceeded in power by the electro-thermal bath.

It is a bath-tub of non-conducting material, with the rheophores arranged along the sides, so that the electricity can be sent in any direction through the water, including in its action the patient who is placed therein.

The advantages of this method are many, among which are these : The patient need not be touched by the hands of the operator, the direction of the currents being perfectly governed by means of a key-board. The avoidance of concentrating the current on any

one part, as in the application with sponges, and the consequent avoidance of shock to any part, as the spine. The certainty of the application is not lessened, while, if a local treatment of any part is desired at the same time, it can be made through a sponge to the part radiating the electricity from that point on all sides.

Bearing in mind the effect of this form of the force on muscle cell, whether of the striped or unstriped variety, it will be readily seen how there is not so efficient a treatment as this for obstinate constipation in all the range of therapeutics. The contractions of muscle produced by electricity are perfectly physiological, and the renewal of tissue thus obtained is permanent and normal; and all the drugs of the pharmacopœia, pummelings of the movement cure, change of climate, or of diet, could not do it as well. If the curing of constipation were the only thing we could do with it, would it not be deserving of high praise? But all degenerated muscles are acted on in the same way, and if enough of the contractile fabric cells are left, the nutrition may be so improved that it shall be restored to its normal condition.

This property of acting on contractile fibres enables us to control the formation of hæmorrhoids, to collapse vascular tumours, promote uterine contractions, and restore the tonicity of a dilated bladder.

In glaucoma the application of this current often renders the operation of iridectomy unnecessary, by producing absorption of the effused fluid.

But, besides these dynamic effects, the application of induced electricity has other purposes. It also acts on the nervous system, but in a more general way than galvanism.

We often meet cases in which there is mal-assimilation of food, and although the patient eats enough, he is literally starving in the midst of plenty. There the application of faradism through the medium of the bath has the happiest effect, and rouses to duty the dormant powers through whose dereliction the title of life is turned aside. In the control of pain this current rivals galvanism, and, contradictory as it may seem, sometimes relaxes spasms better.

The *St. Louis Medical and Surgical Journal* publishes some notes on the surgical use of electricity, from the pen of Dr. David Prince, of Jacksonville, Illinois, who also premises a few general observations on terms.

He says, electricity, electric, electrification, are terms employed to cover the whole subject, though sometimes confined to static or frictional electricity. Galvanism, galvanic, galvanisation, are terms employed to denote the form of electricity produced by chemical action, to denote the use of the agent, and the effects produced by its employment. Faradism, faradic, faradisation, are terms employed to denote the form of electricity produced by induction, the uses of this agent or the effects of its employment.

The use and value of terms he thus illustrates: If a galvanic

current be passing along a wire and another wire be placed in close proximity without touching it, a current will flow in the latter wire in the opposite direction, at the closing and opening of the circuit, *i. e.*, at the starting and at the stopping of the primary current. While the primary current may flow constantly as long as the chemical decomposition continues, the secondary current can only exist momentarily, and is repeated just as often as the primary current starts and stops. It is always, therefore, an interrupted current. Faradisation always signifies the employment of an interrupted current, though the interruption may be so rapid as to destroy the feeling of shocks. For the stimulation of nerves and muscles, the high tension of this current and its shaking character, render it most highly useful in arousing organs from a sluggish condition.

The soothing or quieting effect of this current is never direct, but indirect or secondary, as a lethargy may follow such exercise as exhausts from its degree or its duration. Faradisation for paralyzed muscle should, therefore, be of short duration, for the exhaustion of an irritability already enfeebled must do more harm than good.

It is nearly or quite useless for surgical purposes, because it is impracticable to make the induced current heat a metal for cauterisation, or to make it effective in electrolysis. By this term is meant the decomposition of the tissues so as to set their elements free—hydrogen and the alkalies going to the negative pole, and oxygen and the acids going to the positive pole.

For the purposes of electrolysis the negative pole in the form of a needle (or a number of them) is employed to develop hydrogen in the tissues. If the action is only continued for a very brief period, the vitality of the tissue is not destroyed, but a new action is set up which in many instances is sufficient to stop a morbid growth. If the action is continued longer, the tissue is torn apart by the development of hydrogen, and a slough is the consequence of the disintegration.

Ordinary steel sewing needles can be employed for electrolysis, for they are not corroded by the hydrogen, which is developed. When it is the object to produce coagulation and solidification, as in the treatment of the contents of an aneurismal tumour, the needle introduced is connected with the positive pole, and it must be of platinum. The plating of needles for this purpose is useless, because the galvanic current causes the plating to peel off, and if not, the deposit of carbon the needle holds with such closeness that the plating must become detached in the attempt to clean the needle.

Needles connected with both poles may be inserted into a tumour, and this may be advantageous when it is wished not to subject the underlying parts to the passage of the current. This may be the case when the growth is upon the head or face. In other cases the positive current (and *vice versa*) may be introduced through a sponge in the hand, or applied to any convenient part of the body.—*The Doctor.*

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HEALTH OF TOWNS AND CITIES.

Within the last few years sanitary interests have grown almost to the proportion of a distinct science. They have engaged the attention of men of education and philanthropy, both in the medical profession and out of it; and sanitary legislation has been under the careful consideration of statesmen, both in England and America, the two foremost nations of the earth in all that appertains to the welfare of the people whom they govern. Several Acts relating to sanitary matters, have already passed into law in Great Britain, and a Bill has been introduced into the Senate of the U. S., to establish a Bureau of Sanitary Science. The medical profession, too, of both these countries are thoroughly alive to the importance of this subject, and are wisely using the knowledge already gathered, to form and guide public opinion to secure additional legislation. No one at all familiar with the causes of disease and the modes of prevention, can pass through even our most favored rural districts, to say nothing of towns and cities; without being impressed with the great need of legislative enactments, by which the health and lives of the people may be protected, and their welfare and happiness promoted. Some of our city fathers, however, seem to labour under the delusion that in some way or other, owing to climate, abundance of food, plenty of water supply and natural drainage—we are to escape from

many of the perils that older countries suffer from. Lord Palmerston once told a deputation that waited on him, to ask him to order a fast on the approach of an epidemic of cholera, to cleanse their sewers, and diligently visit the dwellings of the poor, and following up the advice, he at once, with his usual energy, enacted such laws as were necessary to carry out measures for purifying the towns and cities. The result was, the reduction of the death-rate, from twenty-six to twenty-three, and in some instances, to seventeen per thousand. The sanitary measures which were instituted, related chiefly to an improvement in the dwellings of the poor; and to drainage. London in the seventeenth century was considered the most unhealthy capital in Europe—but her sanitary condition has so much improved, especially within the last quarter of a century, that she is now the healthiest of the large cities of the world. The death-rate of Paris in the fourteenth century, was about fifty per thousand, and although she has increased three hundred and fifty times since that period, her death-rate previous to the war, was only about twenty-eight per thousand.

The results which have followed the introduction of sanitary measures into English towns, are most interesting and instructive, showing as they do, that towns may be made nearly as healthy as rural districts; by improvements in the dwellings, drainage, and the constant removal of all filth and offal from the streets and alleys. Croydon for example, was at one time regarded as one of the worst country towns in England, in a sanitary point of view, the death-rate being about twenty-eight per thousand. It had no drainage, and filth was everywhere allowed to accumulate. In 1850, sanitary improvements were commenced, consisting in drainage, sewerage, removal of filth, and the introduction of pure water for families. The death-rate fell after the completion of the improvements to eighteen, and in one year to fifteen per thousand. Liverpool was long considered the most unhealthy city in the civilized world; a large proportion of her inhabitants lived in cellars and badly ventilated buildings—surrounded by filth, cesspools, privies, &c. Infectious diseases, typhus, typhoid, &c., were fearfully prevalent, until Dr. Duncan began the work of arousing the authorities to a proper sense of their responsibility, and steps were taken toward sanitary improvements. The result was, the disappearance of all epidemics, and a diminution of the death-rate, to about fifteen per

thousand within five years. Such examples of the value of sanitary measures in the improvement of the health of towns and cities, are of importance to us. Our towns and cities, are for the most part, the growth of comparatively few years, and they are in the most favorable condition for improvement. They readily admit of thorough drainage and sewerage, and pure water can in most cases be readily supplied; and these, together with the constant (not spasmodic) removal of all filth, are the great desiderata.

These are matters, however, that are usually unattended to, until the approach of cholera, or some other fearful epidemic arouses us from our slumbers, and then frantic efforts are put forth, and loads of money expended in cleansing the city, when it is, in all probability, too late. If on the other hand, such measures were regularly and systematically attended to, and all regulations for the cleanliness of the city faithfully carried out, neither the much dreaded cholera, nor any other form of epidemic could obtain a foothold amongst us.

RESUSCITATION IN APPARENT DEATH FROM CHLOROFORM.

Our attention has been called to this subject from a melancholy case that occurred recently in London. From the report of the coroner's inquest, which is before us, we learn that on Thursday, May 1st, chloroform was administered to a Mr. Rice of that city, for the removal of some tumors of the eyelids. During the operation, the chin was observed to drop and the face to become deathly pale. On examination, it was found that respiration was suspended, and that the pulse could not be felt at the wrist. He was immediately placed upon the floor (we believe he had been sitting on a chair) and about 15 minims of Spts. of Ammonia diluted with eight or ten parts of water were poured into his mouth. This was not swallowed. Artificial respiration was then commenced, by mouth to mouth inflation, and after two or three inspirations and expirations it was suspended, and more of the Ammonia mixture was poured into his mouth.

In about a minute and a half respiration and circulation were fully re-established, and the operation was concluded. In an hour or two after the recovery from the chloroform, the patient began to

complain of soreness in the throat, and in about four hours after the operation, he was found to be suffering from his throat ; respiration very difficult and 34 to the minute ; pulse over 130. He died about 36 hours afterward ; the report of the *post mortem* was not given.

The jury returned a verdict to the effect that the deceased came to his death from congestion of the lungs caused by Spirits of Ammonia diluted, and without attaching any blame to the surgeon, recommended that in all cases of chloroform administration, at least one additional physician or surgeon be present. We make no comment upon this verdict. The reader will draw his own conclusion. The case, however, brings up a subject of great practical interest, namely, the best methods of resuscitation, in apparent death from chloroform.

According to physiologists, after expiration, there remains about 170 cubic inches of residual air in the lungs. When, then, a patient ceases to breathe from an over-dose of chloroform, there remains in the lungs 170 cubic inches of air surcharged with chloroform vapour. If circulation continue, the blood in passing through the lungs absorbs more and more of the chloroform, and the system is brought more deeply under its influence. If the flagging circulation be revived by stimulants, it is only to bring additional poison into the system and render death more certain.

Undoubtedly, the first indication, is to get rid of the chloroform vapour in the residual air of the lungs, and this is to be accomplished by means of artificial respiration. Artificial respiration acts primarily by eliminating the chloroform and secondarily by stimulating the circulation. There is no better stimulus to the heart's action, than the presence of pure atmospheric air in the lungs. Simultaneously with artificial respiration, rectal injections of brandy and water may be given, but no stimulant should be given by the mouth until the patient is sufficiently recovered to enable him to swallow perfectly.

In all cases where signs of danger are noticed, the following measures should be adopted. The patient should be placed in the recumbent position and the tongue drawn well forward. Artificial respiration should be commenced without a moments delay. First of all, pressure should be made upon the lower part of the sternum, and against the walls of the chest, to expel some of the air.

In the case of a child, mouth-to-mouth inflation is perhaps the best, but in the case of an adult, Dr. Sylvester's method, or better still, Hunter's double acting bellows or Richardson's pocket bellows should be resorted to. The bellows has this advantage that respiration is carried on quietly without interfering with the heart,—a matter of great importance when life is hanging in the balance. Warmth should be applied to the body, and friction from the toes upwards. Cold water should not be dashed on the chest; and no cold air should circulate near.

If there is no recovery in five or ten minutes, the head and shoulders should be lowered on an incline of 30° . The regurgitation of blood from the system may stimulate the head and heart. Tracheotomy may also be performed and a tube inserted. The efforts should not be relaxed for at least half an hour.

It will be observed that we have not referred to the use of galvanism as a means of resuscitation in these cases. We believe that artificial respiration, especially when quietly induced by means of the bellows, is more efficacious, and far less dangerous. An article on this subject will be found in the present number of this journal.

After all, we think that we would be perfectly safe in saying that very many of the cases of accident from chloroform arise from the haphazard manner in which this anæsthetic is administered. We will refer to this important subject in our next issue.

BARNES' METHOD OF REDUCING CHRONIC INVERSION OF THE UTERUS.

Dr. Barnes of St. Thomas' Hospital, London, England, [*British Obstetrical Journal*,] a new periodical, by the way, the 1st number of which is before us, describes a new method of effecting reduction of the uterus in chronic inversion. It consists in first introducing into the vagina a caoutchouc bag distended with water, and allowing it to remain four or five days for the purpose of dilating the upper part of the vagina and with it the os and cervix uteri. Taxis is then resorted to; should this fail the os uteri is incised at two or three points to relieve the constriction, and the taxis is then applied. This operation is done by drawing down the uterus outside the vulva by means of a sling of tape passed round the body. The neck

being on the stretch ; an incision about two-thirds of an inch long and about one-third of an inch deep is made on each antero-lateral aspect, and one posteriorly. Taxis is then applied gradually ; no bad symptoms have followed these operations. He prefers this plan to that of "forcible reduction" as by Prof. White's method, or "abdominal incision and dilatation of the inverted os" as devised and practiced by Prof. Thomas.

Owing to the inconvenience in the adaptation of elastic bags for the purpose of dilating the os, he has recently had a special instrument constructed, formed on the model of the Stem-pessary. The stem suitably curved is surmounted by a hollowed cup of caoutchouc upon which the inverted fundus uteri rests. The lower extremity of the stem has strong elastic tubular bands attached to it, two of which pass up in front and two behind, and are made fast to a belt around the abdomen so that the uterus is pressed up steadily upon the fundus of the vagina which tends to pull open the cervix uteri.

He also refers to two or three cases in which he mistook inversion for a polypus, and was only warned of his mistake by the excessive pain which the attempt at removal by the wire ecraseur produced, and he closes a very interesting and instructive paper by a few remarks indicating the means by which the error may be avoided. The first is the greater sensitiveness of the *neck* of the uterus ; secondly by the introduction of the sound into the bladder, and the finger into the rectum, the point of the sound may be felt by the finger above the tumor, in inversion, and thirdly he recommends the removal of polypi without anæsthetics, so that if the ligature be tightened round the uterus the pain produced gives warning and opportunity of retrieving the error at the last moment. The ligature round the polypus gives no pain.

CEREBRO-SPINAL MENINGITIS.—Profuse perspiration has been found very successful in the treatment of this affection. It has been stated in some of the daily papers that "hemlock sweats" were almost a specific in the treatment of this disease when it raged so extensively in many parts of the States about 20 years ago. This disease is undoubtedly due to the presence of a blood poison, and there can be no doubt regarding the propriety of full and free action of the skin, with a view to the elimination of the poison from the system.

UNPROFESSIONAL.

The following communication has been handed us for publication. It speaks for itself:—

(To the Editor of the LANCET.)

SIR,—The following card has been published in the columns of the "*Petrolia Advertiser & Sentinel*," and has also been circulated in hand-bill form from house to house :

DR. GRANGE wishes to return thanks to his friends and the people of Petrolia generally, for the remarkably liberal patronage with which he has been favored.

He is pleased to announce that he has made arrangements whereby he can obtain at any time, in consultation, the aid of the best medical talent of Wyoming, Sarnia, Strathroy or London, without additional charge to his patients. N.B.—Indigent persons treated gratis.

Petrolia, May 9, 1873.

You have had occasion more than once to refer, in terms of reprobation, to advertisements of an unprofessional character emanating from men who disregard professional responsibilities. For such violations of comity and good taste there is no tribunal to which we can, with more propriety appeal, than to the profession at large, through the columns of such a journal as the "*LANCET*." A man may affect to disregard the opinions of a few, but he must be more than a man, or less, who can endure, without remorse and chagrin, the scorn and contempt of all his fellows. We may therefore hope that the exposure, which it is my duty now to make, will deter others from offending in a similar manner.

It is no compliment to the intelligence of the Petrolia public to suppose that they can be deceived by so transparent a falsehood as that suggested by the second paragraph of the card. I know something of the character of the medical men of London, Sarnia and Wyoming, and I am sure that Dr. Grange will find it difficult to persuade any of the regular physicians of those places to hold any professional intercourse with him, when their attention has been directed to this card.

It will not surprise the readers of the "*LANCET*" to be informed that Dr. Grange is one of those practitioners who systematically violate and disregard all the courtesies and ethics which are recognized among honorable medical men. These regulations are fully as much in the interests of the public as in those of the profession; and the man is dangerous, as well as disagreeable, who refuses to recognize and abide by them.

"Hic niger est; hunc tu, Romane, caveto."

Yours truly,

MEDICUS.

Petrolia, 20th May, 1873.

ANOTHER INSTANCE—"PILGRIM'S" PROGRESS.—The following article, which first appeared in the columns of the *Guelph Mercury*, has been going the rounds of the press, and we feel also constrained to give it the benefit of our circulation :—

"By the kindness of Dr. McGuire, we were to-day enabled to examine a very curious and rare surgical case, which he has now under his care. It may be remembered that some two months or so ago a little boy, son of Mr. John Pilgrim, about eight years old, was accidentally run over by a cutter, the runner of the hind bob passing obliquely over the knee and quite round the limb, bruising the tissues badly, and making a wound which gaped seven inches. Dr. McGuire was called in, and after consultation and a good deal of consideration, he determined, in order, if possible, to save the leg, to try an experiment which is somewhat rare in the annals of surgery. This was to inoculate the injured limb with some skin from the boy's father's leg. He broached the subject to the father, who was perfectly willing to submit to the experiment, if the child's leg could thereby be saved. Accordingly, about a fortnight ago, the first steps in the experiment were made. The Dr. took from the father's leg six pieces of flesh—each piece being scarcely as large as a five cent piece—and immediately transplanted them, so to speak, to the boy's injured leg. The doctor tells us that he cut the *full* depth of the skin, and that he believes therein consists the success of this experiment. That it *has* proved successful we were enabled to judge for ourselves to-day, having, in company with the Doctor, paid a visit to the little sufferer, and examined the limb—the appearance of which simply defies description. We may say, however, that the pieces of flesh thus *inoculated* have taken root, so to speak, and are rapidly growing larger and spreading over a greater surface, and that they will shortly push out in every direction until they ultimately meet and join one another. It is the doctor's intention to make a further inoculation, so as to insure the more rapid healing of the leg, which is, however, progressing in every way most favorably. As a surgical experiment it has proved as successful as it is unique and rare—being, we believe, the first case tried in this country, while the cases elsewhere have been very few and far between ; and we cannot, therefore, wonder if Dr. McGuire takes a natural and professional pride in its successful issue."

Both these are instances of the length to which some men will go for the sake of a little temporary notoriety. The practice of inviting members of the press to witness operations and examine cases about which they know nothing, with the view of getting a gratuitous puff in the papers, is an old dodge frequently condemned

by the profession. We cannot but express our surprise that Dr. McGuire, a practitioner of 12 or 13 years standing, should so far lower himself as to indulge in any such questionable means of spreading his fame abroad.

The effect too appears to have been carefully studied. The Dr. took the portions of integument from the father's leg and cut the *full depth* of the skin. It would not appear so miraculous if they were taken from the boy's chest or arm; and then the operation was "unique" and "rare," being the "*first case* in this country" and "few and far between" elsewhere—wonderful prodigy! This little operation of transplantation, performed every day in our hospitals or in private practice, so simple that it is scarcely ever referred to now in our medical periodicals, is thus magnified into a procedure bordering on the miraculous, when reported by Dr. McGuire through the editor of the *Guelph Mercury*. Such conduct is highly reprehensible, and no one who has any regard for the ethics of the profession, or respect for himself, would permit any such fishy production to appear in print.

GALVANISM IN APPARENT DEATH FROM CHLOROFORM.

Dr. B. W. Richardson has performed some very interesting experiments on rabbits with a view of ascertaining the value of galvanism in apparent death from chloroform. He used the battery for three distinct purposes: first, to excite and sustain respiration; second, to excite and sustain the heart and respiration; third, to excite the heart while the respiratory process was sustained by artificial respiration. The various forms of galvanism were tried, frictional electricity, the continuous current and the interrupted current. First, a rabbit is put gently to sleep with vapor of chloroform; the administration is carried on quickly and, at the end of four minutes, the rabbit is practically dead. It is allowed to remain in this state a full minute, but it is not moved or handled. Artificial respiration is now commenced with the double action bellows and kept up for three or four minutes and the animal recovers. Another equally healthy rabbit is narcotised until it ceases to breathe. At the end of one minute, one pole of the battery by means of a needle, is brought in

contact with the larynx and the other in contact with the diaphragm. When the contact is made and broken, respiratory action follows the same as if the lungs were emptied and inflated with the bellows. The action is continued, but it is noticed that the muscles begin to respond more feebly and soon cease entirely. The current is gently increased; again the muscles contract; but at last they cease to act under any current; but if the current is passed through the limbs, the muscles of the limbs respond readily enough. What is the explanation? The muscles are *exhausted* by the electrical current. The electrical current "under a semblance of restoring life clenches death." The thorax is opened and the heart, at first is seen to be at rest; in contact with the air, it recommences to pulsate. A weak current is passed through the heart, and immediately the organ flags and stops, the muscular tissue being exhausted by the electric current in the same manner as the respiratory muscles.

Dr. Richardson at one time thought it would be well to combine galvanism with artificial respiration, but he had less success than when he used the bellows alone.

"After these experiences," Dr. Richardson says: "I feel it would be too unreasonable to recommend galvanic action as a means of resuscitation. Galvanism is a two edged sword. It might, by accident in some cases, restart respiration, but it would in this respect be inferior in principle to artificial respiration, and in the majority of cases it would more effectively promote death than restore life. . . . One day we may see how to use electrical excitation with advantage, and on a known principle; but that day has not arrived."

URINE AS A MEDICINAL AGENT.—The injection of healthy urine into the bladder has been strongly recommended by Dr. Clemens of Frankfort in cases of catarrh. The bladder is first washed out with tepid water, and healthy urine from a young person in its warm state is injected. It has also proved serviceable in allaying spasm. The injection may be repeated twice or thrice a day.

MEETING OF THE MEDICAL COUNCIL.—The meeting of the Medical Council, at the request of some of the members, was postponed until the last week of the present month, commencing about the 24th inst.

SPENCER WELLS AS AN OVARIOTOMIST. — Spencer Wells has operated for ovarian tumor upwards of 500 times, and the mortality has steadily declined with each hundred, until, in the fifth hundred, eighty per cent. recovered and only twenty per cent. died. His fame as a successful operator has attracted to him patients from all parts of Europe. The Samaritan Hospital, of which Mr. Wells is surgeon, is an ordinary London dwelling-house, of brick, five stories high. Each room has an open, soft-coal fire, and a ventilator over the outer windows. Bi-chloride of methylene is the anæsthetic solely used by him for the past four years. He uses the clamp in most cases, but is not wedded to it, and frequently uses ligatures. He says the ligatures, cut short and dropped in, take care of themselves. No carbolized ligatures are used. The sponges are cleansed with sulphurous acid and warmed at the fire. He gives good diet, as soon as the patient wants it. The urine is drawn every six hours, and the bowels are moved after the seventh day. He relies a good deal on the temperature, which is taken frequently.

ANTIDOTES TO SEA SICKNESS.—Bessemer suggested an antidote to sea sickness, that of arranging a swinging berth which would always be horizontal, and now, we learn "an English joint-stock company, which proposes practically to realize Bessemer's antidote against sea sickness by the construction of two steamers for the channel trade, has been organized in London. Its name is to be the 'Bessemer Steamboat Company (limited),' with £25,000 in £50 shares. Bessemer is the engineer, Reed the builder, and Lord Henry Lenox, M.P., the President of the Directors, among whom is Admiral Sir Spencer Robinson. The two steamers are expected to be completed in from eight to ten months, and will have all the comforts of first-class boats in addition to the advantages of the invention. The company has also been granted the exclusive right to run steamers of this kind between the following five ports: Dover, Folkestone, Ostend, Calais and Boulogne."

CAUSE OF GOITRE.—M. Thomas (*Chemical News*) is of opinion that goitre is due to the absolute absence of iodine in the natural waters used in mountainous countries. These researches deserve attention, for it appears that water coming in contact with copper pyrites, or the products of its oxidation, is deprived of any trace of iodine or its compounds which it may contain.

ETHER VS. CHLOROFORM.—In an article in the *Brit. Med. Jour.*, March 8th, Dr. Hutchinson, of London, remarks, in reference to the general question as to the choice of anæsthetics, that we ought, with the exception of a few cases, to allow ether to supersede chloroform. At the same time he prefers chloroform to ether in the aged and the very young. Ether produces more cerebral excitement than chloroform; patients struggle more violently, and sometimes become unmanageable as if drunk; less air is allowed, and consequently there is greater liability to venous congestion about the head; all of which are attended with some degree of risk in a senile and degenerate brain. In young infants, his experience is that chloroform is exceptionally safe, and infinitely more convenient than ether in such operations as hare-lip, for instance, and he therefore gives it the preference.

MEMORIAL TO VON GRAEFE.—We learn from the *Boston Medical and Surgical Journal* that it is proposed to erect a bronze statue in memory of Von Graefe, to be placed in front of the Charité Hospital Berlin. Committees have been appointed in Boston, New York, and Philadelphia, to co-operate with the central committee at Berlin in obtaining subscriptions for this purpose. Subscriptions will be received by either of the members of the Committee. The following are the names of the gentlemen who compose the committees:—Boston, Messrs. Williams, Jeffries, and Derby. New York: Messrs. Agnew, Althof, Noyes, and Hackley. Philadelphia: Messrs. Norris, Dyer, and Thompson.

TRANSFUSION OF MILK IN CHOLERA.—In the *Practitioner* for July, 1873, is an article from the pen of Dr. Hodder, of Toronto, on the transfusion of warm milk into the veins of patients in the later stages of Asiatic Cholera. The experiment was tried in the Hospital Toronto, during the cholera epidemic of 1849. In the first and second cases the patients rallied immediately and ultimately recovered. In the third the patient, although in *articulo mortis*, rallied for a time after the transfusion, but the operation not being seasonably repeated, the patient succumbed.

SUCCESS.—Nothing is so successful as success. If a physician is supposed to have a large practice, everybody will contribute to make it larger; just as a man who is reputed to be rich can always borrow.

LIGATURE OF THE ARTERIA INNOMINATA. — Mr. O'Grady of Mercer's Hospital, Dublin, (*Medical Press and Circular*) performed this unusual and interesting operation on a patient about 60 years of age, a few weeks ago, for the cure of a large subclavio-axillary aneurism. The subclavian artery was so involved as not to be reached. The bifurcation of the innominate being low down, it was found necessary to remove the inner third of the clavicle. The common carotid was also tied near its origin. The patient rallied well and continued well during the first 24 hours, when symptoms of serous apoplexy set in and he gradually sank.

INTRODUCTION OF THE STOMACH PUMP TUBE.—Dr. McEwen, in the *Glasgow Med. Journal*, Feb. '73, recommends that the head should be bent forward on the introduction of the tube, instead of backward, as is generally taught in books. When the head is thrown backward, he says, the spine becomes convex anteriorly. When the tube is passed along it has a tendency to impinge upon the larynx; but when the head is bent forward, the mouth, pharynx, and œsophagus form a curve along which the tube glides gently into the œsophagus and at the same time is directed away from the larynx.

SENATE TORONTO UNIVERSITY. — At the recent election for members of the Senate, to be chosen from among the graduates, in accordance with the terms of the act recently passed, the following gentlemen, among others, were chosen: Dr. J. H. Richardson, Dr. Thorburn, Dr. McFarlane, and Dr. Oldright. It will be seen from the above that the Medical Faculty is fairly represented in the Senate, four out of fifteen, the whole number to be selected in this way, being members of the medical profession.

CANADIAN MEDICAL ASSOCIATION.—The next meeting of the Canadian Medical Association will take place in the city of St. John, N. B., on the 6th of August. The St. John Medical Society are making preparations for the reception of the delegates. A ball is proposed at the new Academy of Music. The following gentlemen were appointed at the last meeting, to deliver addresses on the present occasion:—Dr. Howard, on Medicine; Dr. Hingston, on Surgery; Dr. Hodder, on Obstetrics, and Dr. Botsford, on Hygiene.

CORRECTION.—By some strange oversight the letter in the May No. of the LANCET, on "Malignant Diseases of the Orbit," (p. 454) was not credited to the writer. It should have been signed, A. M. Rosebrugh, M.D., Toronto.

DEATHS.—Baron Liebig, the great chemist, died at Munich, on the 18th of April, at the age of 69. It is intended to erect a monument to his memory.

Josiah C. Nott, M.D., of Mobile, on the 31st of March, in the 69th year of his age. The following resolution was passed at a stated meeting of the Academy of Medicine, New York, Austin Flint, Sr. President—*Resolved*, that in the death of Dr. Nott, we recognize the loss of one of our most devoted members ; a gentleman eminent for his high integrity and his unblemished character, distinguished alike as an ethnologist, gynæcologist, and surgeon, and by his untiring zeal for the advancement of medical science.

His chief literary works are “Broussais on Inflammation,” a translation, published while yet a student ; “Physical History of the Jewish race,” “Types of Mankind,” “The indigenous races of the Earth,” “Tract on the Negro.” He also enjoyed a large and extensive practice, and distinguished himself as a successful Gynæcologist.

NOTICE TO SUBSCRIBERS IN ARREARS.—We beg leave to intimate that, during the course of the present month, we will draw upon those subscribers who are still in arrears, through the Express Company.

We also beg leave to state that we are now about to make a transfer of the names of subscribers from the old to a new list, and we would take the liberty of saying that the names of those who are upwards of one year in arrears will be dropped, and their accounts rendered forthwith. It is now upwards of a year since we adopted the cash-in-advance system. We have done our part by way of enclosing bills and reminders, and those who are still in arrears will only have themselves to blame if they find their Journals discontinued and their accounts placed in other hands for collection.

TORONTO UNIVERSITY.—The following gentlemen have successfully passed their final examination in medicine in this University:—Messrs. Armstrong, Beeman, Close, Gunn, Gray, Hagle, Meldrum, Morrow, Nichol, Richardson, Robinson, and Wright.

University Gold Medalist :—J. A. Close.

“ Silver Medalists :—M. I. Beeman, A. Wright, and S. D. Hagle.

Starr Gold Medalist :—N. W. Meldrum. ”

“ Silver Medalists :—J. A. Close and S. D. Hagle.

APPOINTMENTS.—William Walter Meacham, of the Village of Odessa, Esquire, M.D., to be an Associate Coroner within and for the County of Lennox and Addington. John Adams, of the Village of Gravenhurst, Esquire, M.D., to be an Associate Coroner within and for the Territorial District of Muskoka. Samuel Knapp Lake, of the Village of Bloomfield, and Isaac Frederick Ingersoll, of the Town of Picton, Esquires, M.D., to be Associate Coroners within and for the County of Prince Edward. James Douglas Stephenson, of the Village of Kleinburg, Esquire, M.D., to be an Associate Coroner within and for the County of York. Samuel Cowan, Esq., M.D., of the Village of Harriston, to be an Associate Coroner within and for the County of Wellington. Octavius Yates, of the city of Kingston, Esq., M.D., to be an Associate Coroner within and for the County of Frontenac. Oliver Rupert, of the Village of Maple, Esq., M.D., to be an Associate Coroner within and for the County of York.

WILLIAM SLOAN, of the Village of Blyth, to be the third trustee under 34 Vic., Cap. 42, Sec. 14, to receive from municipalities the bonuses voted in favour of the "London, Huron and Bruce Railway Company."

The Consul General of the Netherlands in Canada has appointed Mr. W. N. Wickwire, M.D., as Vice-Consul of the Netherlands for the port of Halifax, N.S.

CASES IN TORONTO GENERAL HOSPITAL.

(*Reported by G. S. Ryerson of Trinity College.*)

CASE I.—Mrs. J. P., æt. 35, a native of Canada, was admitted to the Hospital under Dr. Geikie's care, April 17th. The patient is a strong healthy-looking woman, and was employed as a maid-of-all work in a boarding house in this city. Her mistress, a woman of quick and fiery temper, became suspicious that she obtained an undue share of her husband's attention, whereupon she (the mistress) obtained a pistol from one of the boarders under the pretence of "shooting cats;" catching her husband in the girl's room she fired, and the latter sustained the following injuries.

On washing off the clots, it was found that the left eyeball was collapsed. The cornea being perforated at its lower and outer side; the vitreous and aqueous humours had escaped and the lens had disappeared. The right eye was congested and had several grains of powder imbedded in the sclerotic coat. A good deal of powder was also imbedded over the greater part of the face, and some grains of shot could be felt in the forehead.

April 19th.—Ordered to be kept in a dark room with perfect quiet. R sol. atropine ; one drop in the right eye twice daily to keep the pupil dilated.

April 20th.—Feels better ; pulse normal ; no appetite.

R—Ext. Belladon. fl.	℥ss.
Vin. Opii.	℥i.
Zinci. Sulph.	grs. viii.
Aqua ad.	℥viii —M.

Ft. Lotio. ; to be applied continuously with cloth.

Continued about the same up to April 24th, when the left eye being very much swollen and painfully tense, it was deemed advisable to let the contents out with a bistoury.

April 36th.—Slept none last night, complains of a great deal of pain in the left eye ; very slight discharge ; opening almost closed ; powder specks on the face inflamed.

April 20th.—Eye again opened, considerable discharge ; improving ; it appears likely to slough away.

May 1st.—Eye again very painful ; patient can get no rest ; very weak.

May 2nd.—As patient was suffering great pain from the left eye, and as it could never be of any use and might endanger the sight of the other, it was deemed expedient to excise, which was accordingly done by Drs. Bethune and Geikie with forceps and scissors. It being thoroughly disorganized, it was removed in small pieces.

May 3rd.—Vomits considerably ; feels weak ; can get no sleep.

May 5th.—Erysipelas has set in ; forehead swollen ; tender on pressure ; left socket doing well.

R—Lotio plumbi Oj., to be applied to the forehead with a cloth.

May 7th.—General health not very good.

Erysipelas in the forehead, extending upwards into the scalp and down to the superciliary ridges ; eye feels comfortable ; abscesses forming.

May 8th.—Opened same.

May 14th.—Improvement ; right eye quite strong ; left lid still swollen.

May 21st.—feels quite well ; powder spots remaining on face and in right eye. Left orbit nearly healed.

May 22rd.—Recovered so as to be able to go out. The left eyelid is still somewhat red and swollen but the sight in the right eye is perfect.

CASE II.—COMPOUND FRACTURE OF THE ULNA WITH DISLOCATION OF THE HEAD OF RADIUS FORWARDS :—Under the care of Dr. Geikie.

F. H., æt. 28, a reporter by occupation, was standing on the platform of one of the stations on the line of the Great Western

Railway, when a projection of some kind, from a passing car, struck him on the left forearm, about the junction of the upper, with the middle third of the limb, causing the above injury. This happened at 8 o'clock a.m., of the 19th of April. He was admitted into the Hospital at 4 p.m. on the same day.

He was immediately put under chloroform, and an examination made, which shewed in addition to the external wound, the deeper soft tissues to have been very much crushed and the *ulna* broken in three places, one situated a little below the olecranon process and the other two nearer the middle of the bone, and more or less comminuted. From the opening in the soft parts the blood was oozing very freely.

The surrounding tissues were found much pulpified, and the head of the radius dislocated forwards.

After the reduction of the dislocation under chloroform, the arm was placed upon a well-padded rectangular wooden splint. No bandaging of the limb was employed—the injury received being such that no compression whatever was admissible.

After having done very well since his admission on the 24th, his arm was very much swollen; pulse 120 compressible. Feels very weak, deep seated erysipeles had evidently set in—ordered—

R—Tinct. Ferri Mur.	℥ss.
Quin. Sulph.	grs. xvi.
Aquæ ad.	℥viii. —M.

A tablespoonful every four hours.

April 25.—Arm very tender, much of the erysipelatous blush present.

April 26th.—Arm very much swollen; discharges from the opening sanguino-purulent matter; temperature 99; pulse 120; respiration 23; tongue furred, dark.

R—Lot. Plumbi. cloth kept wet with it.

April 28.—Great improvement; pulse 98; temperature lowered; skin cool and moist; fluctuation present from deep seated formation of pus.

April 26th.—Enlarged openings with bistoury; copious, sanguino-purulent discharge; is able to move and has strange sensation in fingers from injury sustained by the nerves.

May 3rd.—Has been improving till to-day, when the arm is again much swollen.

May 4th.—Arm again freely opened opposite the olecranon; free discharge of pus.

May 6th.—Feels very much better; spirits good. Patient being of a very nervous temperament, is very restless.

May 9th.—Complains of a great deal of pain for the last two days. On examination, the head of the radius is movable from the injury done the surrounding parts, was found to have become again somewhat displaced. No difficulty was found in replacing it, and to retain it, the arm was placed at an angle somewhat more acute.

May 14th.—Spiculæ of bone protruding through one of the apertures were removed with forceps. General health is now good ; has had linseed poultices applied continuously since the suppuration began up to the present. Ordered now for the greater lightness to have warm water dressing covered with oiled silk, to be changed as required.

May 20th.—Openings cicatrizing ; has no pain.

May 23rd.—Swelling abated ordered to have a plaster of paris splint to secure perfect rest ; was allowed to sit up to-day for awhile.

May 26th.—Swelling entirely abated ; patient able to be up and walking out in the open air. He has begun passive motion and there is every prospect of his having a good useful arm with the various movements of the forearm wonderfully good when the great severity of the injury he sustained is taken into account.

BOOK NOTICES.

A MANUAL OF QUALITATIVE ANALYSIS. By Robert Galloway, F. C.S., Professor of Chemistry in the Royal College of Science for Ireland. From the fifth London Edition ; pp. 402, 12mo., 1873. Philadelphia : Henry C. Lea. Toronto : Copp, Clark & Co.

The above work is divided into three parts. Part I. treats of the systematic qualitative analysis of metallic salts. Part II. the ultimate and proximate analysis of organic substances. And Part III., which seems singularly misplaced, treats of chemical manipulations, apparatus and reagents. Notwithstanding some slight defects the work forms an admirable text-book on the subject of practical chemistry. Some important additions have been made to the present edition, such as the mode of detecting poisonous metals and acid radicals in organic mixtures ; the detection and isolation of vegetable alkaloids ; Bunsen's flame reaction, &c., &c. The new nomenclature has been adopted throughout exclusively. The author adopts, in his work, the progressive method of teaching the principles of chemical analysis, and a series of questions are set at the close of each chapter to test the progress of the pupil. The style is clear and explicit, and the mechanical execution of the work is all that can be desired.

ALLINGHAM ON DISEASES OF THE RECTUM.—Second Edition, revised and enlarged. Philadelphia : Lindsay & Blakiston. Toronto : Willing & Williamson.

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CEREBRO-SPINAL MENINGITIS.

BY D. LESLIE PHILIP, M.D., BRANTFORD, ONTARIO,

(*Read before the Brant Medical Association, June 3rd.*)

This so-called *new disease*, which, however, is no new disease, but has existed from time immemorial from the description of it given by early authors, though not recognized as a distinct affection until the beginning of the present century, made its appearance in this town and neighborhood, for the first time, last winter, and having seen a number of cases, a short description of the disease, as it manifested itself here, may possibly be of some interest to those who have not as yet witnessed its peculiar manifestations.

The first case, I believe, which occurred in the town, which is typical in most respects of the disease, as it prevailed here, was a patient of a medical friend, a young boy, 8 years of age, healthy, robust, and of good family history. He had been out playing upon the ice in the afternoon, in the month of January; on the evening of the same day he had a very severe rigor, which in a short time was followed by intense pain in the back of the head and for some distance down the spine in spots—nausea and vomiting were prominent

symptoms from the first, and persistent for several days. The conjunctivæ were injected, presenting a peculiar reddish appearance.

The skin, during the first week, was dry and harsh, afterwards occasional perspirations of a very profuse character occurred. The tongue was comparatively clean and moist; pulse 112, full but weak; respirations 16. I saw him upon the 5th day of the attack in consultation and several times subsequently. I found him lying upon his abdomen with his head drawn back upon the neck with rigidity of the muscles of the trunk. He lay constantly in this position, the least attempt at alteration not only being uncomfortable, but appearing to give him positive pain. This position was singular and was persistent throughout nearly the whole of his illness. It is not the position in which patients are prone to lie in this disorder, being generally upon the back, or frequently the right side. It is so exceptional that Dr. Gordon, who witnessed a very large number of cases which occurred in the Irish Epidemic a few years ago, noticed it in one case only. He says, "the patient, a girl, lay on her abdomen and refused to allow herself to be moved on her back or on either side. Her spine presented a most wonderful uniform curve concave backwards, her head was also curved backwards on the spine of her neck."

The boy's pulse was 120 per minute, weak and thready, and respirations 17. There was no delirium and no coma, but he lay in a sort of semi-torpid condition with a hesitation in answering questions and a manifest wish to be let alone. The tongue presented no marked abnormal appearance at any time, and in the cases which I have seen, it forms no guide whatever in forming either a diagnosis or prognosis, being generally tolerably clean and moist until the approach of death. Urine normal in appearance and kidneys acting well; bowels have a tendency to constipation. The tetanoid phenomena were well marked and persistent in this case from the first, tonic contraction of the muscles of the neck and back, retracting the head firmly backwards, as in opisthotonos. The pulse varied at different periods of the day without any alteration in position from ten to twenty or even thirty beats. The temperature in this case was not noted, but as the disease progressed it showed a well marked remittent type, there being exacerbations of fever and increased pain observable generally in the afternoon; and in the course of a fortnight sometimes a remission in the symptoms of two or three days dura-

tion, when he would appear considerably better, able to talk ; free from pain ; appetite somewhat improved ; (muscular rigidity and the peculiar position in which he lay being always persistent.) When his friends would fondly imagine that the worst was past, all the symptoms would again increase in a well marked ratio, again to partially subside at the end of three or four days. He continued in this state for about ten weeks, having been reduced almost to a skeleton, when he was seized with a convulsion from which he rallied followed on the next day by another, and subsequently by a third which terminated in death. No petechial spots appeared at any time in this case.

As showing the difference in the intensity of the morbid cause, the following case, a mild type of the disease, though with well marked characteristics may be noticed in contrast with the last. On the 9th April, I was sent for to see a little girl six years of age, whose mother had lately moved into town from the County of Oxford. The child had been ill for a few days previous to removal, with symptoms apparently of remittent fever, and for which she had been treated by the physician in her neighborhood, and it certainly presented a good many of the characteristics of that disease. When I saw her, she was lying upon her right side, in a semi-torpid condition, though extremely irritable when disturbed ; and well marked cutaneous hyperæsthesia. She complained of a pain, well marked, persistent, but not at all severe, in the back part of the head and down the spine ; there was no rigidity of the muscles of the neck or trunk, but she complained of what might be called a muscular stiffness and pain in the umbilical and epigastric regions. Her tongue remained in almost a normal condition throughout the attack ; pulse was rapid with a tendency to variation, and respirations diminished and out of all proportion to the pulse. The symptoms were remittent, being more prominent in the afternoon and evening, increasing in intensity for three or four days and then diminishing in a like ratio, to pass again through the same process. She had been treated pretty freely at the commencement with quinine and small doses of mercury which, however, appeared to exercise no curative effect. She continued in this condition for about four weeks, when the symptoms gradually disappeared, and she regained her health without leaving any injurious sequelæ whatever. The persistence of the symptoms, the well marked pain in the head and spine, with exac-

eruations at intervals, the muscular stiffness with increased cutaneous sensibility, &c., left no doubt in my mind that the case was one of mild cerebro-spinal meningitis.

The third and last case I shall notice is one illustrating the suddenness of the onset and alarming nature of the symptoms within a short period of the attack. On the 16th April last, I was sent for by telegraph to Ratho, a village on the B. & L. H. R., about 25 miles distant, in consultation with Dr. Oakley. The case was one of the earliest in that neighborhood. The patient a young woman, 17 years of age, while going about her usual occupation, three days previous to my visit, had a very severe rigor which was soon followed by intense headache and pain in the back, with high fever, nausea, and vomiting. She was delirious within twelve hours of the attack, alternating with consciousness. When I saw her the vomiting was still persistent; she had one or two watery stools at the commencement followed by constipation. Her pulse was 120, feeble, thready, and variable, and respirations 14, and sighing. She was quite delirious at intervals, the delirium partaking of a hilarious character. The conjunctivæ were injected, intense hyperæsthesia of the skin, and complains of a good deal of pain about the umbilicus. Tongue moist, covered with a slight mucous secretion. She was drenched with perspiration, and her extremities were cold to the touch; pupils were dilated but sensible; no squinting. There was a want of perception of the gravity of the situation, and an apparent unconcern about its issue. There was no marked muscular rigidity, but a good deal of muscular pain in the shoulders and between the scapulæ. Thirst was a prominent symptom; craving for acidulated drinks. She was in a state of collapse. She was ordered stimulants cautiously with the hope that reaction would set in; I did not hear the result of the case as yet, but it looked very unpromising.

These three cases illustrate the *grades* of the disease as it manifested itself in this neighborhood. There were a few cases in which the first symptoms of the disease were the first symptoms of death, and in which it occurred twelve hours after the attack, and others of so mild a character as to lead to doubt as to the real nature of the disease. Three cases known to me lasted more than ten weeks, two of which died in the end from convulsions; the third is still alive and slowly recovering; (now going on the third month) the organs of the special senses which had been for so long in abeyance, beginning gradually to resume their functions.

There can be no doubt that an inflammatory condition of the cerebro-spinal meninges exists in these cases, and this condition is so constant as to distinguish epidemic meningitis from all other diseases, there being a tendency in all cases of the *materies morbi* to act upon the nervous centres, leading to purulent and plastic exudation. Stillé who has written a very able monograph upon the subject and has collected a vast amount of information from many sources, says, "that according to its type and its duration, there never fails to be found some of those changes in the membranes or in the substance of the great nervous centres which denote the existence of inflammation, congestion of the vessels, and exudation of serum, fibrin or pus beneath the meninges ; and different degrees of alteration in the nervous pulp, attest the nature of the process, and since all or any of these may be found, it follows that however essential the lesions may be to the disease they do not constitute its exclusive manifestation, as death is compatible with the early and forming stage of the inflammatory process, as well as with its complete evolution and as the former is not always sufficient to account for the fatal issue, it is clear on this ground alone, that as in other affections there is a constitutional element, a morbid condition of the blood which underlies all of the phenomena of the disease, and modifies more or less its "physiognomy." There can be no reasonable doubt therefore, that we are entitled to regard it as a compound disease derived on the one hand from its specific cause, and on the other from its local lesions, and showing it to be at once a blood disease, and a meningeal inflammation. This may fairly be assumed as the result of accumulated evidence, and in opposition to the few who still look upon it as a local meningeal inflammation merely, or those others who look upon it as a fever, analogous to typhus or typhoid, ignoring its local lesions altogether. This arises from the fact of either element, being the more prominent in any epidemic, or in any individual case, the septic element overshadowing the local lesions and *vice versa*.

Tourdes strikes the key-note, when he says, "although pathological anatomy demonstrates an inflammatory element in the disease, it is certain there is something besides ; it is a specific inflammation, a poisoning, a cerebral typhus, produced by a specific miasm, which has an elective affinity for the membranes of the nervous centres." It is, says Stokes, a disease *sui generis*, and is not to be regarded

merely as the expression and representative of internal local lesions, the symptoms are not in exact proportion to the lesions, nor are they all explicable by them ; hence it is necessary to admit a constitutional as well as a local element of the disease, which often becomes the predominant one, just as in eruptive and typhoid fevers, the most fatal cases are those in which death occurs at so early a stage, through the violence of the constitutional element, that the local lesion remains incomplete, or is entirely undeveloped. It is therefore highly probable that the *materies morbi* exerts its primary action upon the blood affecting the cerebro-spinal meninges, and for which it seems to have a special affinity.

In the more severe form of the disorder as it prevailed here a large number of the cases proved fatal, death generally resulting within the first week, and in a few cases within a few hours of the attack. In some of those who recovered, convalescence was tedious and protracted, and occasional relapses took place. In the epidemic witnessed by Tourdes, 60 per cent. proved fatal and the same proportion is given in the epidemic which prevailed in Alabama in 1848. In the more recent epidemics this percentage has considerably diminished it is said, and it may be that the disease is becoming somewhat modified and presenting a less malignant type than formerly. The treatment adopted was of course based upon general principles, different therapeutical measures being employed with reference to the indications in individual cases. Depletion to any extent was not employed, not even purgatives, for which latter, according to accumulated evidence, there is no room in this disease. Quinine, with small doses of calomel, has acted beneficially as a palliative without apparently exercising any curative effect. Bromide of Potassium was largely used and in many cases was of undoubted benefit. Cold persistently applied to the head and spine in the early or forming stage is undoubtedly of great benefit and generally grateful to the patient ; counter-irritation by means of a blister or the croton oil liniment, with revulsive applications to the extremities, by means of sinapisms, formed the basis of the treatment adopted ; stimulants were freely used when called for, as in all diseases tending to death by asthenia.

PARACENTESIS THORACIS.

BY WALTER LAMBERT, M.D., AMHERSTBURGH, ONT.

CASE I.—In the latter part of December, 1868, I was called to Windsor to see a female, aged 38, married, no children, in consultation with two physicians there. Her heart was beating on the right side of the sternum, just underneath the right breast. Her disease had been diagnosed hydro-pericardium; but after a careful examination, I came to the conclusion that it was hydrothorax of the left pleura, to which the other physicians assented. She had been a very stout and healthy woman until within the last three or four years. Since that period she had been on the decline, gradually becoming more and more emaciated with an occasional cough; no expectoration, and no particular localized pain, but laboured respiration, particularly at night, which was thought by her then medical attendant to be asthma, and was treated accordingly. She belonged to a family with good lungs; but both of her parents, I think, have since died from valvular disease of the heart. During her illness she had been treated by an eclectic, a homœopathist, and lastly by a “regular physician.” Her most prominent symptom when I first saw her, was impending suffocation; and this, coupled with displacement of the heart and other physical signs, at once induced me to diagnosticate an immense collection of fluid in the left pleura, recently very much augmented no doubt, but had been collecting from a chronic pleuritis for several years. I immediately suggested paracentesis thoracis to relieve the oppression. The other doctors agreed, and I introduced the trocar into that part of the chest where the heart should have been, and drew off a great quantity of serum, with much relief to the patient. It continued to drain for about twenty-four hours after the canula was removed; but after it had ceased to dribble away, the fluid re-accumulated and the oppression returned. It was not considered advisable to repeat the tapping, as her constitution was too far spent. She died about one week afterwards. This patient might perhaps have been saved if she had been tapped in time and the operation repeated once or twice.

CASE II.—My second patient was a French Canadian girl, aged twenty. She, also, had been on the decline for a few years. Her

menstruation had been very irregular for a long time, and her endurance for work had become remarkably slight. However, she had continued to busy herself with household affairs, without any regular or seated pain, but had not the vim nor alacrity for work that she formerly enjoyed, without really knowing why. About March, 1870, she suddenly became worse, and I was summoned to see her. She had then somewhat hurried respiration, but not laborious. Circulation increased, with a pulse more irritable than quick; pain in the left clavicular region. No cough at first, but afterwards one frequently recurring with a slight bronchitic expectoration. On percussion, the resonance of the left side appeared somewhat dull, but not strongly marked. On auscultation, the vesicular murmur was indistinct and distant,—in fact, more tubular than vesicular. Right side natural. In a few days the vesicular murmur completely disappeared on the left side, and we could hear only slight respiration, or rather tubular breathing, at the root of the lung posteriorly, and the whole left side of the chest had become flat on percussion. I first prescribed \mathcal{R} Liquor Ammon. Acetatis \mathfrak{z} viii., Ant. Tart. Pot. grs. ij., Ft. Sol. Sig. A tablespoonful every two hours. This was followed by \mathcal{R} Pot. Bicarb. \mathfrak{z} ss. Tinct. Digitalis, \mathfrak{z} iii. Spirit. Etheris Nit. \mathfrak{z} ss. Mucilage Acaciæ ad \mathfrak{z} viii. Ft. Sol. Sig. A tablespoonful every three hours. Afterwards I administered Pot. Iodidi. and then the Subiodide of Mercury. I then used Counter-irritation, first by turpentine stupes, then with cantharides, and lastly with Tinct. Iodine, but nothing was of any service; and one morning when I went to see her I found her propped up in bed, and laboring for breath. I then instituted a closer examination of the naked chest, and found the intercostal spaces of the left side more prominent and bulging than those of the right side; the measurement, also, of the left greater than that of the right. I had suspected this before leaving home, and had brought with me a trocar and canula, and likewise some Carbolic Acid. I introduced the trocar under the antiseptic veil, *a la mode de Lister*, between the sixth and seventh ribs, two or three inches from the nipple, downwards and backwards at the most prominent point. A good stream of laudable pus flowed for some time,—I forget exactly how much. It continued to dribble away after the canula was removed. I dressed the opening with the antiseptic paste, and ordered Cod-liver Oil. The wound closed up in a few days, and the dyspnœa returned. I tapped again: this time below the scapula; and then re-opened with

the lancet at the first cicatrix, which was bulging. I repeated this a second time, and changed the simple Cod-liver Oil to that of the Iodinated, which, *en passant*, I have found immensely superior to the simple when we are treating large abscesses or patients with extensive suppuration. I have fully tested it in a number of cases. The suppuration ceased, the wound healed, and the patient got well. As might be expected, the walls of the left side of the chest fell in to adapt themselves to the carnified lung. She shed her hair and her nails after her illness. I examined her about two years afterwards and found very fair respiration on the left side, with perfect action on the right.

CASES III. & IV.—Since that time, I have operated on two others. The one, a woman, aged thirty-nine, married, and mother of thirteen children. During the early part of November, 1871, she took cold a week or so after confinement, which produced subacute pleuritis of the left side, with effusion. I tried all legitimate therapeutical remedies to promote absorption, but none succeeded; and as the patient suffered from an intolerable pain in the subclavicular region, and suffocation was impending, I tapped and drew off a large amount of serum. I repeated the operation below the scapula in about one week, and again in the antero-lateral region. The patient recovered and has enjoyed tolerable health for the last eighteen months. The fact that the patient belonged to a tuberculous family militated somewhat against a rapid recovery, and she doubtless would have succumbed to her malady if the operation of paracentesis thoracis had not been performed.

The other was a boy aged six years, with empyema following typhoid fever. I tapped twice and drew off fully one half-gallon of pus. He recovered from this disease, but died a few months afterwards from hydatids of the liver.

Two things I have remarked in the majority of those upon whom I have operated. First, there is a pretty constant pain in the clavicular region of the affected side. This is relieved immediately by the operation, and returns as the sac re-fills. Secondly, the best point for introducing the trocar is the antero-lateral region, somewhat below and behind the breast of the affected side. Possibly it may appear more bulging below the scapula, but you will not succeed so well in emptying the sac, should you introduce the trocar there, as you will by operating in the first named place.

REMOVAL OF A FIBROUS TUMOR FROM THE UTERUS.

BY JAMES CATTERMOLÉ, M.D., L.S.A., LONDON, ONT.

Mrs. A., aged fifty-one, for the last eight or nine years has been much troubled with uterine hemorrhages, sometimes severe and exhausting, latterly attended with bearing-down pains and general pelvic uneasiness. Her appearance is quite anæmic, almost ex-sanguinous, skin of a greenish-white and icterode hue, pulse quick and feeble, appetite bad, and much prostrated by her long affliction.

Several months ago a fibrous tumor of the uterus was diagnosed by her then medical attendant, who put her under palliative treatment, considering operative interference too hazardous. On examination I found the os dilated to the size of a twenty-cent piece, and the lower part of the tumor pressing against it. In passing the finger up between the mass and the posterior wall of the uterus, it encountered a number of thread-like adhesions, which were readily broken down. I then passed the uterine sound easily, to the extent of six inches, up to the fundus, and readily discovered the tumor to be firmly attached by its base, which was rather more than three inches in diameter, to the anterior wall and adjacent portion of the fundus.

I hesitated to operate on one so much enfeebled, fearing the shock would prove too much for her, but rather considered it desirable first, if possible, to improve her strength and condition. For this purpose I prescribed tonics, nourishing diet, and stringent applications to the interior of the uterus, for a period of three weeks. No benefit, however, was derived from this course; the poor patient rather losing than gaining in strength. It now became evident that immediate and complete removal of the offending mass held out the only chance of saving the life of the patient. Therefore, with the concurrence and efficient assistance of Dr. Moore, of this city, on Monday, April 14th, I proceeded to extirpate the tumor. During the week previous to the operation the patient took, daily, three twelve drop doses of the fluid extract of ergot, which had the effect of protruding the lower end of the cordiform mass, about an inch through the os uteri, and rendering the neck sufficiently dilatable. The patient being placed on her left side, I passed a loop of steel-wire up between the posterior wall of the uterus and the tumor, as high as the fundus, then pressing it forward, with a finger applied to each side of the loop, I succeeded in encircling its broad base. The

free ends of the wire were now fastened to the ecraseur and gradually tightened, being still pressed by the fingers, until a groove had formed sufficiently deep to retain it in situ. The instrument was then worked very slowly, occupying a period of nearly half an hour, before detaching the mass from its bed.

Chloroform was not administered, but the patient had two or three doses of brandy instead. Not over a tablespoonful of blood was lost during the operation. This heart-shaped mass measured somewhat over three inches at its base, and from the base to the apex or lower end five inches. Its weight was thirteen ounces. The parietes were composed of dense fibro-cellular structure, in some parts nearly an inch and a-half in thickness. A cavity existed in its centre large enough to admit a body twice the size of the middle finger. It evidently grew from the muscular tissue of the uterus, and the covering of its free surface resembled the uterine mucous membrane. Its lower end exhibited signs of decay prior to its removal, probably caused by being tightly embraced by the os. The principal difficulty that presented itself in the extirpation of this tumor was its great breadth of base and firmness of attachment to the uterine wall, and the consequent uncertainty of being able to detach it otherwise than by piece-meal process, which probably would have been followed by tedious sloughing, and possibly pyemia. This risk was happily lessened by our good fortune in having overcome the difficulty of ensnaring the outgrowth and detaching the whole of it in one operation. The extirpating process caused no great amount of suffering, the brandy afforded great support, and a full dose of opium immediately after the operation rendered the patient tolerably comfortable, and so she continued for about forty hours, when symptoms of metritis set in, which, however, by the ordinary treatment, consisting of opium, hot fomentations, &c., and good nursing, yielded in a few days, leaving the patient extremely prostrated, so that for some twelve or fourteen days her life seemed to waver in the balance. However from that time improvement, although slow, has been steady, and during the last fortnight she has been able to take a little walking exercise.

The beneficial results that mostly follow disencumbering the womb of its unnatural burden, in similar cases to the above, may, I think, be sufficiently suggestive to the young physician, that even in instances where extreme prostration exists, operative procedures are not only justifiable, but positively necessary, as holding out the best, if not the only chance of alleviation or cure.

CASES OF EXCISION.

BY J. LIZARS LIZARS, SURGEON, TORONTO.

No. 1.—*Excision of the Metacarpo-Phalangeal Joint of the Right Thumb.*

In reading the 1st edition of Frank Hamilton on fractures and dislocations, I was struck with his sound sense when writing on the subject of fractures of the distal-phalanges. (Vide 1st Ed.) I had put his views into practice ere I read the work, and reported to him a case in point. (Vide *op. cit.* 4th Ed. p. 333.) He deemed the trifle worth insertion in the 2nd edition, and I daresay more than one young surgeon has acted on that case and saved a phalanx our predecessors would have lopped off, and every intelligent person has only to reflect for a few minutes to understand the great value one of those same small phalanges may be to its possessor. What, for instance, would have been the fate of Paganini had he lost the last joint of his forefinger?

Stimulated by Professor Hamilton's appreciation of the above case, I have frequently striven to save fingers that would generally be condemned to amputation, and although I can point to two cases where amputation would have been better, nevertheless, I can safely say I have saved, for useful purposes, 5 that would have been taken off 50 years ago for every one I should have removed within the last ten years.

Considering, therefore, the smallest part worth saving when there is any hope of its being of some use, no matter how little, I was recently in a position to apply my theory to practice, as the following case, which, so far as I can discover, appears to be unique, will show:—

R. S., Canadian, 18 years of age, whilst feeding a small circular saw, (the first day of his apprenticeship to the business), had his right hand cut by it down the radial side of the 1st phalanx of the forefinger of the right hand, and thence across the metacarpo-phalangeal articulation of the thumb, whereby the skin over and tendons of the extensors pollicis (primi and sec. internod.) were destroyed for over half an inch in length and the articulation laid bare.

Objecting to submit to amputation, as was advised by the medical men first consulted, I was called upon in consultation, and on

examination of the finger, finding the arterial and nervous supply still good and the sheath of the long finger untouched, I suggested the propriety of attempting to save the organ by resection of the two bones forming the joint. My main reason for this proceeding was that the thumb, acting like a second hand by its power of opposing itself to the fingers, is necessarily of more value than any of the fingers. Had we, on the other hand, attempted to save it by simply dressing the parts and keeping it quiet, a long time must have elapsed ere the cartilages would be removed, and ankylosis, perhaps, take place, and during this time the periosteum of one or both bones might be implicated, necrosis take place, finally requiring amputation.

My views being acquiesced in by Drs. W. W. Ogden and Moorehouse, on the 2nd of May, assisted by the above named gentlemen, I stripped upwards and downwards the soft parts to a very slight extent, and with the bone pliers removed the cartilaginous extremities of the phalanx and metacarpal bone, applied torsion to one small vessel and brought the skin as nearly together as possible by suture, fitted a splint to the palmar surface of the thumb and thenar eminence, and placed a bandage over all.

The parts were re-dressed from time to time as required, and I finally applied a plaster of Paris bandage, which fitted like the thumb of a glove, and was retained with a few turns round the wrist. On the 20th I removed all dressings, by which time the wound had cicatrized and the two bones were firmly united.

When last I examined the patient, a week or so later, he had free action of the short muscles of the thumb and *slight* power of the long flexor over the last joint. I say *slight* action as the proximal end of the distal part of the extensor having become incorporated with the dorsal cicatrix prevented the flexor from pulling the last phalanx downwards to a right angle and dragged it back to a straight line when the flexor was relaxed, much as a band of India-rubber might do.

As I have never seen, heard, or read of this excision having been practised before, and as it has saved to the boy a very useful thumb, I think it may justify you in giving it a place in the columns of the CANADA LANCET.

No. 2.—*Excision of the Elbow Joint.*

Mrs. J., æt. 21, consulted me in May '71 for disease of the

elbow joint (right). She stated that her parents had been healthy, that her father died from cholera when she was a child, but that her mother was living and strong. She herself is of the dark strumous type, some of her sisters of the light variety of the same constitutional dyscrasia. She affirmed that she had received no injury to the joint, but that several months prior to consulting me she awoke one night suffering greatly from pain in the part, that this had gone on, and she had consulted medical men, &c. The minutiae of the history of her case it is unnecessary to give, suffice it to say that, when I first saw her, an operation had been proposed, but she objected, and after seeing several doctors she came under my care.

The patient being at the time "enciente," and having various affairs to attend to, could, or would not, submit to an operation until the 22nd February, 1872, at which time the joint was swollen, some sinuses led into it, the arm and forearm were wasted and (as seen in a cast in my possession) fixed at a right angle. Her pain was constant and the limb deprived, to a great extent, of its usefulness.

On the 22nd February, '72, having satisfied Drs. Canniff, Crawford, Cassidy and others, of the existence of articular disease, we operated in one of the ordinary ways, viz : a straight incision down the outer and posterior aspect of the joint, with a transverse one from the middle of the former, and, as no difficulty was experienced, the operation was easily completed and the limb placed in one of the ordinary positions.

As the operation was performed for the relief of a local manifestation of a constitutional disease, it could not be expected that her recovery should be very rapid. It is, however, very gratifying to me to be able to report that since the operation she had one child and is again "enciente," and is able now to make free use of her hand so as to lace her corsets or button her dress at the back, sweep, scrub, wash and attend to the various duties of a young wife or mother.

The particulars of her case, from month to month, would only annoy your readers, but the cast taken a few days ago, shows that the forearm and hand have been saved, and the joint can now be extended far beyond its former limits and flexed to some extent less than a right angle. She is still improving.

No. 3.—*Re-section of the Shoulder Joint.*

Notwithstanding the fact that the above mentioned operation

has, during the present century, been frequently and successfully performed, both in civil and military practice,, for chronic disease and transmitted injuries it seems, like other excisions, to have found but little favor in Ontario. I have therefore much pleasure in sending the following case for publication, hoping that the good result obtained, the simplicity of the operation and after treatment, may lead other surgeons to test its utility.

Before detailing this case I must first endeavour to impress on the younger or less experienced members of the profession, certain views which I have held and taught as a lecturer on surgical anatomy for many years, and which are sufficiently established by this and the case of J. N. (see *Canada Lancet*, Oct. 1872, p. 57 et seq.!) viz. 1st. That when we have to interfere with a muscle whose function we desire to preserve, it is of paramount importance that we should avoid, as much as possible, division of the nerve supplying it. 2nd. That although various authors have recommended that where fistulæ or wounds lead to the diseased parts, the line of incision should pass through them, I strongly advise that should such incision implicate the trunk nerve leading to important muscles, a new line should be chosen, as we know by experience that, once the diseased bone is removed the soft parts are pretty sure to become healthy and old fistulæ and sinuses to close.

J. G., a well built, highly intelligent and very healthy boy of 12 years, was sent to me by my friend Dr. Spragge of this city, suffering from immobility of the left shoulder joint, swelling, tenderness on pressure or attempted motion, loss of rest, nocturnal pains and fistulæ.

The only history to be obtained was very deficient, owing to the absence of his mother and death of his father, but from all we could learn, he had over a year ago sprained the joint structure, producing a low chronic state of inflammatory action, ending in abscess, and when placed under the influence of chloroform, the probe passed into the joint, readily detected dead and carious bone. There was little or no motion of the joint. Under these circumstances, as the best nature, without operative interference, could do for our patient would be to throw off the dead and diseased bone and establish permanent ankylosis, we placed before his relatives the chances of a useful limb after resection and, as they readily acquiesced, the operation was determined upon.

On the 11th day of March, 1872, (the *prima via* having been previously attended to) the patient under the influence of chloroform, I made an incision along the inner fibres of the deltoid (which from want of use was considerably atrophied) from the outer side of the coracoid process downward and backwards (merely enough backward so as to follow the direction of the muscular fibres, and keep external to the cephalic vein) to near the insertion of the muscle. This incision being made by the firm plunge and downward cut of a small catline, at once opened the capsule of the joint and enabled my assistant, by forcible retraction of the elbow and abduction of the forearm from the mesial plane, to bring the head of the humerus out through the wound. I may here remark, that my line of incision was determined, not by the position of the fistulæ, but solely upon the anatomical ground that by so doing I would divide only a few terminal filaments of the circumflex nerve going to supply the small fasciculi of the deltoid lying anterior to it and thus preserve the full nervous and arterial supply of nearly the whole of its substance. Again, had we failed to throw the head out of the straight incision, it was my intention to make a horizontal one from the upper end of the first, backwards about half an inch from the outer end of the clavicle and acromion, as far as necessary, as by so doing, I would still spare the nervous supply.

Having separated the capsule from the anatomical neck and protected the soft parts by a fold of linen, I sawed off the head, but finding some parts of the cut surface diseased, or at least doubtful, it was deemed prudent to sever the attachments of the muscles to the tuberosities and remove a second section of the humerus. This being done there still remained a small portion of the surgical neck on which the periosteum seemed loose. We therefore left it to exfoliate. Some parts of the margin of the glenoid fossa being removed with forceps, and unhealthy soft structures with the knife, the wound sponged out with solution of carbolic acid, and all bleeding arrested, the parts were accurately brought together, united by suture and dressed with lint soaked in carbolic solution, pads and bandage, and the patient placed in bed with the arm over his chest.

To detail the daily progress of the case would be a work of supererrogation. Suffice it to say that nothing was left undone by Dr. Spragge, and the boy's friends, that ought to have been done; that his recovery had very few drawbacks; the incision healed

kindly and steadily. Soon small exfoliations came away as expected. Passive motion was early practised and insisted upon, but required some manœuvering to accomplish, as our intelligent youngster found that by allowing the scapula to move freely he saved a little inconvenience from pain. By impressing on him the necessity of motion we soon got him to use the arm more and more. At the end of less than three months he returned to Mr. Magill's school, Toronto, and after that he was taken to Boston, U. S., and placed at school. The last account I had of him was that he was enjoying base ball on Boston Common, the use of the deltoid being as perfect as could be expected, considering the shortening of the bone, and the time allowed for its accommodating itself to circumstances.

Correspondence.

(To the Editor of the LANCET.)

SIR,—Having been called to see and prescribe for a little girl at the Mansion House, I send you the following notes of a curiosity :

Josephine Corbin, born on the 12th May, 1868, in Lincoln County, Tenn., U. S., shows, on examination, the following peculiarities :—Her body is well formed as far as the umbilicus, but about three inches below it there exists a second depression resembling the ordinary scar. Her father, William Henry Corbin, informs me that at her birth there was but one cord, and that it was attached to the upper mark. Her haunches are a good deal wider than usual, and have attached to them four distinct and almost perfect legs—two long ones and two short.

If the reader will look at the back of his left hand, and keep the thumb out of sight, I may more easily make my description understood. The four fingers represent the four legs. The middle and ring fingers, or short legs, come together in the mesial plane of the body as do these fingers, there being no organs between them as might have been expected. Both of these legs possess the various segments and joints of normal ones, but the hip joints seem slightly peculiar, as if the necks of the thigh bones were irregular in shape,—the hamstrings are somewhat contracted, as are also the sural muscles, and both feet are extended and turned inwards. This has resulted

from the child only using these limbs to kneel on. When sitting or lying she frequently crosses these limbs over the knees of their fellows, when the soles are directed upwards.

These short limbs are respectively left and right, as are also the large ones, thus: The middle finger is the left leg of body *A*, of which the fore finger is the long leg; and between this pair of legs are the female organs of generation and anus. The long right leg of this body is club-footed—*Equino-varus*. Again, the ring finger is the right leg of body *B*; and between it and the little finger, or long left leg, is another set of female organs.

The fore and little finger legs—that is, the right leg of body *A*. and left leg of body *B*.—are those on which the child walks, which she does “mighty well,” considering all things.

Her father informs me she urinates usually through both urethræ and defæcates, sometimes on one side, sometimes on the other.

I am sorry the child was too ill to enable me to make a more careful examination of the rectal, vaginal and urethral passages. This may yet be done by some other observer; and I hope I may again see an account of her case, as it is interesting to speculate upon the point where the two bodies join, and the ultimate development of the child into two women.

Yours, &c.,

J. LIZARS LIZARS,

L. R. C. S., Edin., and M. R. C. S., Eng.

(To the Editor of the LANCET.)

SIR,—The vigorous manner in which your journal places its foot on all species of quackery, is very gratifying to lovers of honorable practice. It was high time such charlatanry as you have recently been exposing should have been held up to contempt, and its perpetrators singled out from the body of an honorable profession. But there are yet a few cases to be dealt with, whose rhinoceros skins render them insensible to anything short of open and pointed exposure.

Some practitioners endeavour to make a little capital out of every epidemic that visits their localities, regardless of the degradation they thereby bring upon the profession. It is perhaps needless to add, that men capable of such conduct are those who most re-

quire whatever propping is to be derived from this and similar practices. The statements made in such cases are usually substantially untrue. In the present epidemic, for instance, of cerebro-spinal meningitis, men of the class under consideration are in the habit of representing that the number of cases they have under treatment is something prodigious; that they have carried all but a few safely through; and these latter are on a fair way to recovery. Such men, of course, never have any deaths from the epidemic in their practice; or, if perchance any case should prove obstinate enough to terminate unfavorably, in which the dread diagnosis of "Spinal Disease" has been pronounced, (and they so pronounce in all their cases, parturient women and a few cases of minor surgery excepted,) then the unfortunate issue is, with all gravity, ascribed to some unheard-of complication, which is perfectly intelligible to the most ignorant, (and to them alone,) and which, they can easily perceive, precludes the possibility of recovery. Of this class of quacks, there are at least two in western Ontario. Since the commencement of the epidemic I have named, they have published in the general newspapers weekly bulletins of their practice, in which their cases are numbered by scores, and are nearly all "rapidly recovering," when, in reality, of the cases of genuine cerebro-spinal meningitis they have had but few; and, having lost a large proportion of them, attempt to retrieve their credit by curing all sorts of trivial ailments under the name of "spinal disease."

Conduct of this sort is so reprehensible, and so repugnant to the sensibilities of all worthy practitioners, that I trust I am rendering the profession good service by exposing it.

M.

To the Editor of the LANCET.

SIR,—I beg leave to call attention to the slanderous remarks accompanying the publication of my card, which appeared in the LANCET for June, * * * * and to make a few explanations in reference to that offensive circular.

Shortly after opening my office here, I became convinced of a disposition, on the part of the local practitioners, to hedge up my way by refusing consultation with me. Whether this arose from misunderstandings of my conduct, which I claim, in every instance, to have been professional and justifiable, or from some less excusable pretext, I will not assume the right to determine.

Having been thus thrown upon my own resources, in self defence I published that card, in which, without making, by way of explanation, any unpleasant allusion to any medical man, I simply wished to inform the people of Petrolia that I was not helpless of professional aid, when required; and that this state of things, though inconvenient to me, should be no disadvantage to those who gave me their patronage.

During many years of practice in Napanee, I met with all my medical brethren of that place, and nearly all within a range of twenty miles of that town. I have, moreover, been favored with the counsel of many who stand among the first in the profession in the cities of Kingston, Belleville, and Toronto; and since commencing practice in Petrolia, I have met in consultation, at the sick bed, with several respectable "regular physicians" of Wyoming, Strathroy, and London, who were fully cognizant of my "unprofessional" proclivities.

I have ever lived in amity with my medical brethren, and have striven to be above such petty jealousy and low suspicion, as those who know the circumstances will at once detect in the letter of one calling himself "Medicus."

The intelligent public of Petrolia has already recorded its verdict in this matter, entirely to my satisfaction. Of this fact, "Medicus" is fully aware, and I feel no hesitation in submitting to the judgment of my medical acquaintances whether I am "one of those practitioners who systematically violate and disregard all the courtesies and ethics which are recognized among honorable medical men."

In conclusion, Mr. Editor, let me assure you that I should never have noticed the aspersions of an anonymous correspondent, were I not brought in contact with the medical men of Ontario, whose good opinion I esteem, and lest, by my silence, I should be thought by them to be "unprofessional."

Yours, &c.,

Petrolia, June 19th, 1873.

JAS. GRANGE.

Selected Articles.

THERAPEUTIC USES OF ELECTRICITY.

BY SAMUEL WILKES, M.D., F.R.C.P., F.R.S., GUY'S HOSPITAL.

* * * Franklinism, or frictional electricity, after having done good service for many years, was thrown into the shade by the brilliant discoveries in electro-dynamics; for it was found that, besides its other properties, the induced current possessed a most powerful effect in exciting contraction of the muscles. The two forms of machine came into use—the magneto-electric and the volta-electric apparatus—according as a permanent magnet or a temporary

magnet was employed. It has not yet been decided to which we must give the advantage. In hospital practice, we use a machine where the secondary current is induced in a coil of wire by one or two small galvanic cells; and this is the instrument preferred by Duchenne. It has the advantage of being self-working, and therefore requiring the use of one pair of hands only, besides developing a current which is less painful to the patient. The other, or magneto-electric machine, is in more favor with the public, since it is far easier to find in a dwelling-house a person competent to turn a handle than to understand the mysteries of a galvanic cell.

We are indebted almost entirely to Duchenne of Boulogne for introducing faradisation (as the induced current is now called) to professional notice, and proving its great utility in various forms of paralysis. His services, too, were equally great in demonstrating by its use the normal action of the muscles. By applying wet sponges, to which were attached the poles of his battery, he caused each particular muscle to contract and display its physiological use. He thus gave us a fresh insight into their actions, and showed also how in various forms of paralysis, as in that arising from lead or progressive atrophy, particular muscles were primarily affected in these diseases. Duchenne's mode is to press his wet sponges firmly down on the ends of the muscle, and by this means he believes that he directly causes their contraction. This is doubted by some, who consider that the electric current is carried by the motor nerve to the muscle; and by others, who, doubting the existence of so direct an influence, believe that the effect is transmitted indirectly through numberless cutaneous nerves. It does seem true that there are points of selection where the current acts more efficiently, as witnessed in the more vigorous contractions of the trapezius muscle, when the current is applied near the entrance of the spinal accessory nerve. After the introduction, then, of the induced current or faradisation into practice, it began to be very generally employed, and for many years it was the only form of electricity used. The success attending its use was of the most varied character; and, as I before said, judging from my own experience, it failed to do what franklinism had done in paraplegia by the method of withdrawing electric sparks from the spine: in fact, it failed in those cases where we have had of late such marked results from the simple continuous battery current. We found, indeed, that in some cases it was a very useful remedy, whilst in others it was valueless. It must be said, however, that even in a class of cases where faradisation has been successfully superseded, and in which no immediate effect was produced on its application to the muscles, yet by its constant use, in the absence of all other suggested means of treatment, a cure was finally effected. In these it has been surmised that the electricity acted beneficially by stimulating the blood-vessels to increased action, and so improved the nutritive processes; we, therefore, made use of it in all classes of

cases, and met with varied success. It was found beneficial in some forms of paralysis with atrophy, highly useful in hysterical paralysis, and in some old cases of hemiplegia by stimulating muscles which had become inert from disuse. I cannot say that I have ever seen any advantage accrue from the adoption of the methods recommended to the public, as are pictured on the lids of the electro-magnetic machines—as, for example, by allowing the current to pass through the body by grasping the poles of the battery, or by holding one electrode in the hand whilst the other is placed in a basin of water, in which the foot is immersed. I constantly meet with people who buy these machines and go through the performances above named, but apparently with little good. In fine, whilst we possessed only these instruments, and could make use only of the faradic current, we employed it in all forms of paralysis, at the same time feeling quite uncertain as to its success in very many of them.

A fresh impulse was then given to the subject of galvanism by Remak, who demonstrated the great advantage of the simple continuous battery current over the induced or secondary current, known as faradisation. Remak asserted that in experiments on animals the effects of the two forms of galvanism were very different; and his statements as regards paralysed muscles were soon verified. We therefore at once procured for our electrifying room a galvanic battery of a hundred cells, which was capable of being used of any strength. Our assistant, Mr. Sandy, made also a portable machine, which could be carried through the wards. It was very soon apparent that we had made a very important addition to the therapeutic value of galvanism, for we found that the current passed down the spine would influence the condition of the lower limbs where faradisation had altogether failed; and we found, also, that in various forms of paralysis an effect was not only produced where faradisation was inert, but that in some cases the muscles were more susceptible to its influence than in health. In the first case in which it was employed the effects were most striking; it was that of a man who had a paralysed arm, with a gradually progressing wasting of the muscles. It was quite unaffected by faradisation; but, immediately the continuous battery current was used, contraction of the muscles took place, and from this time a gradual cure was effected. It was exactly the same with a case of lead-paralysis. Here no effect was discernible on the application of faradisation; but, on the other hand, there was an extreme susceptibility to the influence of the primary current.

You must understand that the simple transmission of the current along the spine or limbs produces apparently no result—or at least it has to be yet discovered that a current continuously flowing through any part of the body has any effect either on the muscular or the nervous system. It is only when the circuit is broken or closed that an effect is seen. Thus, in the case of the man mentioned just now

with the paralysed arm, one pole was placed on the shoulder and the other was stroked down the deltoid, when, on lifting it from the surface, an immediate contraction of the muscles and elevation of the shoulder took place; and the same occurred again on replacing the electrode. In the case of lead-paralysis, in like manner, one pole was placed on the back of the fore-arm over the upper part of the extensors, and the other pole lower down; when contact was made or broken, contraction of the muscle immediately took place. In this case, as in similar ones, a smaller amount of galvanism roused the irritability of the muscle than would have been required for a healthy arm. If the hand, also, be placed in a basin of water, and one pole of the battery continually dipped in and taken out, whilst the other pole is fixed on the back of the arm, contractions likewise take place. By using the continuous current in these ways, we are now curing very rapidly our cases of lead paralysis. As severe an example of this disease as you could well see was that of the woman who lately left our wards, and whose muscles were so wasted that she was obliged to keep her bed, and was unable to lift her arms to feed herself; yet by persevering in this form of galvanism for three weeks she completely recovered. It is the continuous current which is probably most useful in infantile paralysis.

As regards its application in cases of paraplegia, we place one pole on the upper part of the spine towards one side of the neck, and the other pole on the lower dorsal region, and as often as the circuit is opened or closed a sensation is experienced. At first the effect is stimulating, and afterwards it is soothing. A sensation of warmth is experienced through the whole body, followed sometimes by sweating; and if the current be powerful, it may excite headache and stimulate all the nerves of special sense, causing noises in the ears, sparks in the eyes, metallic taste in the mouth, and at the same time often producing an urticarious rash on the back. In a short time the patient feels soothed; if he has had pains in his limbs they are relieved, and he is inclined to sleep. The simple battery current appears to rouse the dormant power of the cord, and is thus curative in various forms of paraplegia where no organic disease is present. Thus it has been found to be most valuable in some cases of paralysis of motion or akinesia; but it is more especially in cases of want of control or ataxia that its effects have been most marked. In some very severe and chronic cases, where there was reason to believe, from the duration and intensity of the symptoms, that some degeneration of the posterior column of the cord must have existed, a complete cure has been effected. In one case where progressive muscular atrophy had commenced, the disease was arrested by the same means; and in one case of paralysis agitans, where galvanism has hitherto failed to produce any benefit, it seemed as if the patient were deriving good from its use.

The soothing effect of the battery current is most striking.

Thus, in the cases of ataxia of which I speak, pains in the limbs exist as a common symptom, and these are much relieved by its use. In other cases where the paralysis is irremediable, the sedative effect of galvanism has been sufficient to determine its continued use. Thus, in a man now in the hospital with a permanent contraction of the legs from chronic meningitis, from which it is not likely that he will ever recover, so much relief is obtained by the application of the galvanic current to the legs, that the man asks for it in order that he may procure sleep. I can recall several cases of various forms of paralysis where galvanism was most useful in relieving pain and restoring sleep. In simple and pure neuralgia, I can quite corroborate what others have said as to the value of galvanism, and more especially of the primary battery current. I have known faradisation to cure lumbago, but it is the other form of galvanism which has been attended by the most marked success. The relief obtained is generally immediate, and in some cases of frontal neuralgia one application has been sufficient. In longer standing cases, as in that of a woman who was in the clinical ward, a neuralgia of the face, of months' duration, was cured in a fortnight. Since this, we have had two somewhat similar cases.

The greatest disappointment which I have experienced hitherto has been in spasmodic affections of the muscles. In old cases of contraction of the limbs, due to organic change in the centres or nerves, no cure could be expected; but in the temporary and functional forms it might have been hoped that in galvanism we had a speedy means of relief. This has not been so, however, in my experience. I have had the case of a contracted arm in a girl which, for want of a better name, we called hysterical, and in her we used galvanism most perseveringly; we tried both forms, and in various modes, reversing the currents and operating on both the affected and unaffected muscles, but with no success. It was just the same with the case of wry-neck lately in the hospital. The man had galvanism most unremittingly applied to the contracted muscle as well as to the healthy ones. It was used in various modes by Mr. Sandy, but only with temporary benefit. If he appeared better for a day or two, he again relapsed into his former state. * * *

As regards the different effects of the primary and secondary currents, it has been suggested that these are due simply to the fact that the one is continuous and the other interrupted; therefore, that if the battery-current were broken, it would be found that a muscle or nerve could take cognisance and be affected by it (supposing the susceptibility to faradisation had been shown), whereas if it flowed simply through these structures it would pass unfelt. We have tried the experiment, but hitherto without the result expected; and therefore for the present we have been obliged to regard the two forms of galvanism as practically different. Then, again, it is said that the battery-current acts directly on the nerves, whilst the

faradic current acts immediately on the muscle ; but a discussion of this matter involves the larger enquiry as to the dependence of the muscle upon the nerve for its contractility. The question has not yet been settled. On the one hand, we observe the contraction of muscle on the application of a stimulus when it is entirely severed from the nerves of the body ; and, on the other hand, we know that the muscle gains some kind of stimulation through the nerve, since we observe the dropped face in paralysis of the portio dura, and the falling of the head if sleep overtake us in our chairs. Dr. Marshall Hall believed that whilst a muscle retained its connection through a nerve with the spinal cord its contractility remained, but if the connection were severed this quality was lost. He thus by means of galvanism endeavored to show the nature of the paralysis. In all probability some of his observations were correct ; and no more important question in relation to galvanism can be studied than this, for by making experiments on muscles and discovering the connection between their condition under the influence of electricity, and the integrity of the nerve-centres, we shall be able to use the therapeutic agent as a test. By observing the behaviour of muscles under the influence of galvanism, we may form an opinion as to the state not only of the muscle itself, but of the nerve-centre from which some of its qualities are derived. Of course, when Marshall Hall used the expressions "cerebral and spinal paralysis," he meant in the one case, where a limb was paralysed because cut off from its connection with the brain ; and, in the other case, where it occurred from disease of the cord itself. There is no such thing as cerebral paralysis in the sense in which he used it. As a matter of fact, we find, as he asserted, these different effects. Thus there are now in the wards two cases of paraplegia in which the continuous current, whilst exciting contraction in the one, has no effect on the other. * * *

—*British Med. Journal.*

GEOPHAGIA OR DIRT-EATING.

[We have frequently seen reference made in our political papers to dirt-eating among politicians, but we were not aware it was a disease before.]

Dr. Galt, in his "Medical Notes of the Upper Amazon," published in a late number of the *American Journal of the Medical Sciences*, has furnished us with some curious information on a subject that does not usually come within the range of professional notice—viz., the strange practice known as "dirt-eating," or "geophagia." This disease, according to Dr. Galt, now enters as of the chief endemic complaints of all tropical America, and at the distance of

over two thousand miles from the sea, on the Amazon valley, where the negro is rarity, being merely a waif from Brazil or the Pacific coast, it is the most important disease among the children and women of the country. Here, on the Maranon, the half-breeds are mostly addicted to the practice of dirt-eating—neither the pure savage nor the more cultivated being so often the victims. The accounts about the tyranny of this habit of dirt-eating on the victims of it would seem almost fabulous, Dr. Galt says, were there not evidences all around one to give sanction to them. Children commence the practice from the time they are four years old, or less, and frequently die from the results in two or three years. In other cases they grow to manhood or womanhood; and Dr. Galt speaks of having himself seen in the case of a Mestiza soldier, who was dying from the dysentery which sooner or later supervenes on this habit, the poor creature, half an hour before his death, detected with a lump of clay stuffed in his sunken cheeks. Officers who have the Indian or half-breed children as servants in their employ sometimes have to use wire masks to keep them from putting the clay to their mouths; and women, as they lie in bed sleepless and restless, will pull out pieces of mud from the adjoining walls of their rooms to gratify their strange appetites, or will soothe a squalling brat by tempting it with a lump of the same material. If persisted in, the effects are surely fatal, at varying terms of years, some living tolerably to middle age, and then dying with dysentery. In children, dropsy usually appears to be the most prominent cause of decline and death.—*Cin. Lancet and Obs'r.*

FLUID EXTRACT OF MALE FERN IN TAPE WORM.

To secure the successful destruction and expulsion of tape worm, two points are to be particularly carried out. First, the patient must fast at least twelve hours before taking the remedy; and second, it must be taken in sufficient quantities to kill and expel the entire worm. Frequently it is a matter of good policy to give the patient a cathartic in the night, so as to have the alimentary tract free from feces as much as possible. Then in the morning, on a fasting stomach, give the male fern in some pleasant combination, as the syrup of acacia or glycerine. From thirty to sixty minims of the fluid extract of male fern, must be combined at each dose, and repeated every two hours, until the stomach rebels against it, the patient keeping very quiet in the meanwhile. No worm can resist this treatment when carried out on the above principles. The fern will move the bowels and expel the entire worm. It is the most reliable remedy for tape worm, when given in accordance with the above directions. The patient must fast during the time he is taking the remedy, and the bowels must be previously well cleared out.—*St. Louis Med. Archives.*

A NEW METHOD OF PRODUCING LOCAL
ANÆSTHESIA.

The interest that has been recently manifested in the profession on the subject of anæsthetics, induces us to take an early opportunity of directing our readers to an important paper, by A. Horvath, of Kieff, published in the *Centrsblatt für die Medicinischen Wissenschaften*, proposing a new method of producing local anæsthesia. It is a well-known fact, that if the hand be immersed for a short time in ice-water, an intolerable pain is caused, and the hand has to be withdrawn. In the course of a series of experiments, made in reducing the temperature of frogs by means of cold alcohol, Dr. Horvath observed that no such pain was produced when the hand was immersed in cold alcohol, not even when the temperature of the alcohol was as low as -5° C. Pursuing the experiment still further, glycerine was found to possess a property similar in this respect to alcohol. Ether, on the other hand, caused pain, the same as ice-water, while the pain produced by cold quicksilver was more acute, causing the speedy withdrawal of the finger when plunged into this liquid at a temperature of -3° . It was next ascertained that, when the finger was held for quite a long time in alcohol having a temperature of -5° C., no pain whatever was experienced, and what was a still more remarkable phenomenon, although the faintest touch was distinctly perceived in this finger, yet no pain whatever was experienced from sharp pricks, which in other fingers were sufficient to cause considerable pain. This experiment seemed to show that the application of cold alcohol has the effect of depriving the part of the special sensibility to pain, without, however, impairing the delicacy of the general tactile sensation, which, as is well known, resides in the superficial integument. This apparent possibility of the artificial separation of these two nervous functions, viz., the tactile sensation, and the sensation of pain, and the temporary suspension of the latter, seemed important in a physiological point of view, and also of no small practical utility in allaying certain forms of local pain, more especially that caused by burns, and surgical operations. With regard to burns, Dr. Horvath soon had an opportunity of testing the value of this application on his own person, as well as upon others, and with the most satisfactory results. Not only was all pain instantly allayed, directly the part was immersed in alcohol, but it was found that the wound very speedily began to assume a more healthy appearance, the surrounding redness rapidly failing. The process of healing seemed also to be accelerated. If that theory is a correct one which ascribes the frequent fatal termination of burns to the result of the constitutional shock induced by the severity of the pain, in that case the application of cold alcohol, in that it affords the patient an immediate relief from his sufferings,

will prove a powerful agent in such accidents in saving life. In like manner, this same application may be found valuable, it is thought, in cases of traumatic tetanus. The method of producing local anæsthesia by the aid of ice, ether and rhigolene has been perfectly understood for many years. These agents have never been extensively employed, however, inasmuch as it has been found by experience that the process of freezing the part is often productive of quite as serious pain as would have been experienced from the operation without the administration of any anæsthetic. The ether spray is found to be a source of embarrassment to the operator, for, if not carefully directed, it is liable to take effect upon his own fingers, bringing on a sudden numbness, which is more surprising than gratifying. It can, moreover, be applied to only a limited extent of surface at a time.

The extreme simplicity of this new anæsthetic, the ease with which it can be applied to any part of the body where pain is experienced, or when it is desired to make an incision—all these circumstances tend to make it highly probable that its employment will ultimately become general, thereby doing away, in a great measure, with the disagreeable and dangerous effects of ether and chloroform.—*Boston Medical and Surgical Journal.*

TWO NÆVI CURED BY MONSEL'S SOLUTION APPLIED EXTERNALLY. By JACOB GEIGER, M.D.—A male child, aged nine months, had at birth a "mother's mark" on his perinæum and over the pit of his stomach. They were at first flat, but slightly-elevated spots, and quite small. When the patient was about six months old, however, the tumors took on a very rapid growth; that on the perinæum occupying not only the entire perinæum, but a portion of the scrotum also, while that on the abdomen was an inch in diameter. The perineal nævus was kept so constantly irritated by the child's diaper, his urine, and his fæces, and having on more than one occasion bled considerably, I advised an operation for its cure. The mother positively refused her consent to any other procedure than one which consisted in some external application. I determined, therefore, to try the methodical use of Monsel's solution in both the growths. Making a mixture of equal parts of the liq. ferri persulph. and glycerine, I painted not only the nævi themselves thoroughly with this, but I applied it also for some lines beyond the healthy skin, and directed it to be repeated twice daily. In a week both tumors had diminished appreciably in size; and in less than one month from the date of the first application of the iron they had disappeared altogether.—*The American Practitioner.*

A CLINIC ON THE TREATMENT OF ABSCESS.

BY JOHN SIMON, ESQ., F.R.S., ST. THOMAS' HOSPITAL, LONDON.

In reference to several cases of large chronic abscesses under his care, Mr. Simon remarked, that the only real difference between psoas and most other abscesses due to diseased bone was, that its cause was deep within the body. If the diseased bone could be removed, the abscess would heal; but the bodies of the vertebræ were out of reach: the surgeon could only mitigate the symptoms, and leave the rest to nature. If the disease were only caries, a cure might result, with more or less angular curvature of the spine; but if necrosis were present there was no chance of a cure, the dead bone was not absorbed, its presence kept up a constant purulent discharge and this led to anæmia, to albuminoid disease of the liver and kidneys, and finally to death from hectic and exhaustion.

In all these cases of chronic suppuration the amount of constitutional and visceral damage is closely proportioned to the amount of the discharge: the amount of the discharge is proportionate to the extent of the abscess cavity, and this depends, to a great extent, on the time it is suffered to extend. The great point in the treatment of these cases is, as far as possible, to prevent the formation of a large pus-secreting cavity. If, therefore, there be any suspicion of the existence of deep suppuration, keep a sharp look-out, and open the abscess as soon as you can detect fluctuation, unless the proximity of large vessels, or of other important structures, affords strong reasons for delay.

In situations where the progress of the disease can be watched, as, for example, in abscess of the knee-joint, the difference in the result, according to whether you let out the matter early or not, is very great. If the pus be soon evacuated, there is a fair chance of saving the limb, and even of regaining some motion in the joint; but if the incision be postponed, the joint soon becomes utterly disorganized, burrowing sinuses form, and the neighbouring soft parts become deteriorated by infiltration.

There is, however, this serious difficulty in opening a psoas abscess. Perhaps it forms a large bulging tumour in the groin, yet the patient is fairly well; you cut into it, he at once becomes feverish, and in a fortnight is *in extremis*; then an ignorant person may reproach you with killing the patient. But, however well and strong the patient may appear, it is certain that this febrile condition will supervene sooner or later. It is inevitable. The longer it is postponed the worse it will be, since the cavity of the abscess will be larger. Be careful, then, always to explain to the friends of the patient that the operation is a serious one, but that the consequence will be more serious the longer it is delayed. The severity of the

consequent fever may, however, be greatly mitigated by treatment. Ten days ago I opened a large dorsal abscess in a little girl now under my care. I made a free incision, a very large quantity of thick pus escaped, and air was not excluded, yet the child has hitherto had no fever, and appears quite comfortable. All this time the cavity of the abscess is shrinking ; and if the fever should now appear, it would have been far less severe than it would have been had it occurred immediately after the operation. I owe this satisfactory state of things to the local application of cold ; directly the pus was evacuated an ice-bag was applied, and has been continued since. I have succeeded equally well in a large number of similar cases, and I can confidently recommend ice as an incomparable anti-phlogistic.

Of course, if necrosed bone be present, the abscess will not entirely close ; a mere sinus, will, however, be left, which will not drain the patient to any considerable extent.

As I have said, I do not take extreme precautions to exclude air. At present I am inclined to reserve my judgment as to the value of the carbolic acid treatment, or at least as to the theory on which it is based ; it is not yet proved that bacteria are the cause of unhealthy inflammation ; and emptying an abscess by aspiration does not prevent the inflammatory process in its cavity. Recent experiments do, however, show that bacteria pass very readily in water, and attached to moist things ; and common experience teaches us that infection is much more likely to be carried by sponges and surgical instruments than by mere air. From my own experience, I do not think that air, if only ordinarily pure and dry, is such a poison to surgical wounds as some assert ; but, whatever your theory may be, always carefully disinfect all surgical instruments, etc., with boiling water.

Finally, I must qualify my advice with a caution : remember that fluctuation is not always due to pus. Open early all acute or chronic abscesses, but never cut into collections of blood or synovia. A bruise, in ill-conditioned subjects, may be followed by extensive extravasation of blood, causing a fluctuating tumour, which, if deep in the limb, might easily be mistaken for an abscess. If these extravasations be let alone, and treated with cold applications, they disappear, though they take a long time about it ; but an incision into one is generally followed by grave constitutional symptoms. If well-marked signs of inflammation appear you must treat the swelling as an abscess ; otherwise never open one.

When you are dealing with chronic suppuration always look out for the chronic cause. The tendency of inflammation is to subside, unless there be a stimulus of some sort present. A man was admitted here some time ago with a deep wound in the gluteal region, caused by falling on a spike ; the wound did not heal, and after some weeks, on careful examination, a piece of his trouser was detected

at the bottom. So, again, there is a boy with disease of the knee-joint, in my ward, whose leg has been saved entirely by attention to position. By extension of the limb, and pushing back the femur, we have greatly reduced the inflammation; and whereas the child was before rapidly becoming worse, he is now as rapidly mending. Always treat such displacements in young subjects early and carefully; mere dislocation of the parts will keep up irritation and suppuration, without the presence of any dead bone.—*British Medical Journal*.

THE USE OF POST PARTUM BINDERS.

[At a recent meeting of the Obstetrical Society of Edinburgh, a somewhat remarkable paper was read by Dr. Cairns, opposing the use of binders after parturition, and what is the strangest of all, his extraordinary views appear to have met with very general approbation from the members present.]

The disadvantages in the use of binders enumerated by Dr. Cairns are as follows:—

1st. That their application entails unnecessary trouble upon the accoucheur. Dr. Cairns confesses that when he first entered upon practice, it cost him more trouble to apply the binders in many cases than to deliver either the child or placenta.

2d. That their application unnecessarily exposes the patient, which, if several persons are present, may thereby shock her moral sensibilities; it may, moreover, expose her to currents of cold air, which, on her part, may lead to the most disastrous results.

3d. Post partum binders impede the circulation, slipping far above the region of the uterus, thus interfering with the venous circulation, and thus tending to aggravate two diseases very common in pregnant women, viz., varicose veins and hæmorrhoids.

4th. They are rarely of proper form. They should properly extend from the ensiform cartilage to a considerable way beyond the nates.

5th. In cases of post partum hæmorrhage, the patient may die before the binders can be removed in order to apply the proper remedies for its arrestment.

Dr. Cairns, in conclusion, compares parturition in civilized and uncivilized conditions, and those two with the parturition of the lower animals. The latter, he affirms, owing to their pendent bellies, evidently require binders much more than women.—*Boston Med. and Surg'l. Journal*.

MICROSCOPIC EXAMINATION OF URINE.

BY JAMES TYSON, M.D., LECTURER ON MICROSCOPY AND URINARY CHEMISTRY IN THE UNIVERSITY OF PENNSYLVANIA.

Few subjects are more imperfectly understood by the mass of general practitioners than that of Urinary Microscopy. Many physicians think that if a specimen of urine is handed to a microscopist for examination, the latter must be able to give such copious and precise information as will unravel all the mysteries of the case, and furnish the key to a speedily successful treatment, or else the instrument is condemned as an expensive luxury, which if not useless, is scarcely of sufficient utility to justify the outlay necessary to procure it. It is indeed true that in a large proportion of instances the information furnished by a microscopic examination of the urine is limited, and that in a smaller number of cases its results are entirely negative.

It is in consequence of the fact that many instances of unrealized expectations have come under my observation, that I have presumed to occupy a portion of this evening in considering the real advantages which may be looked for in a study of urine with the microscope.

Premising that such a range of power as is obtained by two objectives, an 8-10 and a 1-5 with two eye-pieces, an A and B, or a low medium power—that is, from 80 to 400—will most usefully subserve our purposes, we may divide urine which is to be studied microscopically into (a) *albuminous* and (b) *non-albuminous* urine.

A. The urine with regard to which we may expect to derive most information, and in the study of which the microscope is indeed indispensable, is albuminous.

The first question to be determined with regard to albuminous urine is as to whether it contains casts of the uriniferous tubules. This question answered affirmatively, the general affection, Bright's Disease, is recognized; the form of cast found to be most prevalent in connection with the quantity of albumen, and especially with the aid of the clinical history, enables us to determine the special form of Bright's Disease, whether chronic or acute; and if the former, whether due to the smooth white kidney, the highly fatty organ, or the chronically contracted kidney, and even amyloid disease, with considerable certainty. And thus informed, matters of prognosis and treatment follow, the value of which no one can deny.

On the other hand, it is exceedingly seldom that the microscope enables us to decide the existence of cancerous from that of other destructive disease of the kidney, as calculous pyelitis, the common purulent products being undistinguishable. Still less are we able to say, by means of the microscope alone, with regard to a limited number of pus or mucous corpuscles, that they are derived from the

kidney rather than the bladder, at least, all attempts to this end are too speculative to be admitted to a space among the positive informations furnished by microscopic examination of urine.

Among the causes producing albuminous urine without the presence of casts is the presence of pus, and although the same corpuscular element attends which is found in mucus, the albumen never accompanies mucus alone, while the distinctive characteristic mucin-threads developed on the addition of acetic acid to mucus furnishes the crucial information. This is apart from the physical characters of purulent urine, involved in the ready miscibility of the pus with the urine, its rapid subsidence and opacity as distinguished from the difficult miscibility of mucus, its transparency and slow deposition after mixture has been produced. Although albuminous urine, which is due to pressure upon the renal vein by a tumor or pregnant uterus, sometimes contains casts when the obstruction has produced actual congestion, this is comparatively rare, and the comfort which is derived by the practitioner from a knowledge that the albuminous urine of a pregnant woman does not contain casts, which the microscope alone can tell him, is unspeakable.

Urine which contains blood, from whatever source derived, is also albuminous. Except, however, when blood corpuscles are contained in casts of the uriniferous tubules, which indicates their undoubted renal origin, it can scarcely be claimed that the microscope is of much service in determining the exact source of the blood. It is rather the grosser characters, as the presence of coagula when blood is derived from the bladder, and the smoky hue of acid urine containing blood from the kidney, that gives us the desired information.

It is comparatively rare that albuminous urine results from affections of the bladder and prostate, except as the result of hemorrhage in malignant disease of the latter organs. In non-hæmorrhagic malignant disease, attended by suppuration and rapid destruction of tissue, the urine may become impregnated with albumen, which will be explained by the presence of pus, and occasionally of fragments of tissue composed of the large multi-nuclear cell-masses formerly considered so characteristic of cancer. In these cases, the almost inevitable though not indispensable accompaniment of vesical irritation will point to the bladder rather than the kidneys.

In the limited number of instances in which I have been permitted to examine the urine of patients who, as revealed by a *post mortem* examination, suffered with cancer of the kidney, although albumen has been invariably present, I have never yet seen the cellular or other elements of cancer—nor, indeed, in cases of cancer of the bladder, though, in the latter, other observers have undoubtedly been more fortunate.

B. Non-Albuminous Urine.—It must be admitted that the purely microscopic study of non-albuminous urine is not attended with so

many advantages to the practitioner as that of albuminous. Still, there are numberless instances in which at least the clinical history of a case is not complete without a microscopic examination.

In no instance, perhaps, is the inexperienced person more frequently disappointed than in the examination of urine from cases of suspected calculi, both renal and vesical, but particularly the latter. Indeed, it may be laid down that, as a rule, except in uric acid lithiasis, the microscope alone rarely furnishes much information. To those who have had any experience, it is well known that in cases of phosphatic and oxalic lithiasis, the urine is commonly without any sediment, from the examination of which alone information can follow. With uric acid lithiasis, however, this is not the case, and very generally patients thus suffering have copious deposits of uric acid crystals. In the latter, therefore, we are able to make a positive diagnosis. The difficulty in the case of the phosphates is accounted for by these facts: The extreme solubility of the phosphates, and the dependence of their deposition upon the alkalinity of the urine; and in case of an exciting calculus, its power to excite, by decomposition of the surrounding organic matter, an alkalinity of the urine immediately around it with consequent deposition of phosphates from such proximate urine, while the reaction of the great body of water continues acid. Occasionally, also, in the case of suspected oxalic calculus, information is derived by examination of urine from the constant presence of octohedral and dumb-bell crystals of oxalate of lime. Especially, if these be aggregated so as to form microscopic calculi of considerable size, as is often the case. If the symptoms of renal calculus are present, and such crystals be met repeatedly, we have good reason to believe the calculus of oxalic composition.—*Southern Medical Record.*

HORACE WELLS, THE DISCOVERER OF ANÆSTHESIA.

The eleventh day of December, 1844, was an era, and a very important one, in the history of surgery. On that day HORACE WELLS, of Hartford Conn., for the first time made practical demonstration of the application of anæsthetics for the purpose of subduing pain under surgical operations. While under the influence of nitrous oxide gas, he had a sound tooth extracted. He remained under the influence of the gas some time after, and immediately upon recovering from it threw up his arms and exclaimed, "A new era in tooth-pulling! It did not hurt me more than the prick of a pin. It is the greatest discovery ever made!" From this time the principle of anæsthesia became an established one in surgery, and by degrees came into general use. WELLS pursued his experiments with nitrous oxide ether, and other agents, with an enthusiasm which eventually

cost him his life. Finding that others were seeking to rob him of the credit of his great discovery, he became disgusted, disappointed, and dispirited. He then went to New York to lay his claims as the discoverer of anæsthesia before the profession of the great metropolis. Soon after his arrival there he manifested symptoms of mental aberration, and on the 24th of January, 1848, in a fit of madness, ended his life with his own hands. He thus left his family unprovided for, and an open field for the unscrupulous to poach upon to rob him of his well-earned honors. To the discredit of the medical profession, many of them were for a time led astray by the specious representations of these parties. But the sober second thought of the profession has become enlisted on behalf of the memory of the unfortunate WELLS, and such men as the late Sir James Y. Simpson, Storer, Sims, Doremus, Hamilton, Squibb, and many others of the leading minds of the profession, are using their influence to do justice to the memory of the real discoverer of the application of anæsthesia in surgical operations.

Expression was given to these sentiments at a large and enthusiastic public meeting in New York on the 21st of May. The meeting was addressed by Drs. Marion Sims, Ogden Doremus, Frank H. Hamilton, and others. We welcome any effort to do justice to the memory of one whose discovery, on the 11th of December, 1844, soon deprived surgical operations of their terror, and proved such a boon to suffering humanity, and such an invaluable aid to the surgeon in the use of surgical instruments. We feel proud of the fact that for twenty-five years the *Medical and Surgical Reporter* has constantly and earnestly advocated and defended the claims of WELLS. May they yet receive that full and free recognition at the hands of the public and the general government which they undoubtedly deserve.

In a communication from Dr. Henry J. Bigelow, of Boston, published in a New York paper, that gentleman, although his object is to support the claim of Morton, is compelled to admit the propriety of Wells' practical application of anæsthesia for surgical purposes, though he endeavors to belittle his achievements, and claims that WELLS abandoned the use of anæsthesia.

In reply to this, Dr. G. Q. Colton very emphatically upsets the theory of the Wells abandonment. "We have," he says, "the sworn testimony of about forty of the most respectable citizens of Hartford, that during the years 1845 and 1846 WELLS extracted teeth for them without pain, using the gas as the anæsthetic. He was in constant use of the gas for about eighteen months, when his health gave way, and he went to Europe. Even in Europe he did not abandon his discovery, for he presented his claims to the Academy of Sciences in Paris, and that institution, in recognition of the services, conferred on him the title of M.D.

"As soon as Wells returned to this country he resumed the

use of the gas, and continued it until his death, which occurred on the 24th of January, 1848.

"But he met the most determined and bitter opposition from all quarters. It was at that time too much to believe that the inhalation of so little gas or vapor would destroy the pain of a surgical operation! Dr. Wells did all that a man could do, while he lived, to prove to the world the value of his discovery. Should he be deprived of the honor of the discovery because the public were incredulous and repudiated his claims?

"Wells died before the merits of the gas were generally recognized. After his death Dr. Morton set up the claim that nitrous oxide was not an anæsthetic, and therefore that Wells had discovered nothing! No one had used the gas to produce anæsthesia save Wells, and Morton was enabled to gain a general assent to the position he took, namely, that nitrous oxide not being an anæsthetic, therefore he, Morton, was the discoverer of anæsthesia! If at that time and during the lifetime of Mr. Wells the gas had proved to be what it really is, and what I have demonstrated it to be, the best and safest anæsthetic known, we never should have heard of Morton as the discoverer of anæsthesia.

"When I revived the use of the gas in 1863, I had this general incredulity respecting its powers to contend with. I was met on all sides by the assertion that Wells had tried the gas and it had proved a failure. I expended eight thousand dollars the first year in advertising, advocating and defending it; and in all this time did not realize a dollar of profit from my business. Is it any wonder that poor Wells, who had no money to spend, should encounter opposition and discouragement in its first introduction?

"It should be remembered that Wells' first experiment, for which I gave him the gas, was on the 11th of December, 1844, and that the first experiment by Morton was on the 30th of September, 1846; also, that Morton was stimulated to this experiment by information derived from Wells, and newspaper notices of Wells' operations.

"In view of all these facts," says Dr. Colton, "how can any one hesitate to award the honor of the discovery of anæsthesia to Dr. Wells?"—*Med. and Surg. Reporter, Phila.*

JOSH BILLINGS ON DOCTRS.—Doktors are not all quaks; yu hav got wrong noshuns about this.

Doktors, lawyers and ministers hav a hard row to ho; they hav to deal with the kredulity, knavery, and fears ov the people, three ov the most difficult traits in human natur tew handle.

If i was a doktor, and understood mi bizziness, i should *doktor mi pashunts*, and let the disease take care ov itself.

More folks are kured this way than enny other.

It ain't much trouble tew doktor sick folks, but tew doktor the well ones is bothersum.

BELGIAN MEDICAL REPORT ON INTEMPERANCE.

In September last, the Belgian Medical Association appointed a commission, consisting of seven of its members, to "report upon the means for opposing the increasing abuse of alcoholic liquors." This report appears in the recently published *Transactions* of the Association. The Commission declares that "the increasing consumption of alcoholic liquors menaces even the vitality of the working class," and complicates every other question relating to their welfare; and warns the government that, if it blindly persist in refusing to conscientiously study this supremely important subject, "impartial history will hold it responsible for all the evils which it would not try to remove." Whilst it is admitted that the wretched condition of the people and the squalor of their homes drive many to drink, it is pointed out that it is not so much poverty which causes drunkenness, as drunkenness causes poverty. "Medical men, who are obliged in the discharge of their duties to visit the wretched hovels in which the poor herd together, can affirm that very often the misery provoked by drink becomes an incentive to drinking. Thus the workman gets into a vicious circle from which he cannot well escape, and is almost inevitably lost." This is a generalisation which, as sanitarians, we too often overlook. The chief causes of intemperance are held to be—the cheapness of liquors, their injurious effects, the great number of taverns, etc., the custom of giving liquors to workmen, and the lax administration by the authorities of the laws relating to intemperance and the sale of liquor. Having pointed out the gravity of the disease, its extent and causes, the commission then attempts the solution of the problem submitted to it—"la thérapeutique"—"the means for opposing the increasing abuse of alcoholic liquors." First, the government is urged to take prompt action, so as to ensure the purity of the liquors purchased by the working classes. Secondly, it is suggested that the Association should use its influence with the government and with the communal authorities to publish, in French and Flemish, and distribute profusely, a pamphlet of a popular and scientific character upon the properties of the different kinds of liquors, and the sad consequences of drunkenness. Thirdly, the action of the legislature is invoked in favour of education in matters relating to health and temperance, and in aid of temperance, sanitary, and co-operative societies. The government is urged to raise the duties on spirits as high as may be safe, and to diminish those on beer, tea, coffee, etc. Fourthly, the local authorities are advised to adopt and enforce very strict police regulations; to prevent the sale of liquors in groceries, "where women often go to get drink," and in cigar-shops; to punish those who sell drink to children and to drunken persons; to keep all taverns under strict surveillance, etc. The report, it will be seen, is of a thoroughly practical yet moderate character, and does credit to the good sense and patriotic instincts of its author, Dr. V. Desguin of Antwerp.—*Brit. Med. Journal.*

A NEW METHOD OF PERFORMING AMPUTATION.—At a surgical *clinique* at La Pitié, Prof. Verneuil advocated the following method of removing limbs, calculated, he thought, to do away with arterial compression, whether by fingers or tourniquet, which is frequently inefficient, and is an exciting cause of phlebitis and sloughing of the integument from pressure, especially in patients who are fat. Flexion of joints, in the cases of the elbow and the knee, will frequently suffice to control hemorrhage when amputations are made below these points; but by the method advocated by Prof. Verneuil, in which the limb is treated as a tumor would be, the hemorrhage is reduced to a minimum. When antero-posterior flaps are formed, a common bistoury is all that is required for incising the soft parts, which are divided into successive layers, the blood-vessels being ligated as they are met with, and before being divided. Veins as well as arteries are closed with ligatures. The bone is divided as in the usual methods. When the principal blood-vessels are so located that they can be included in one of the flaps, it is the practice with the Professor to divide the bone before forming this flap. Twenty-one cases are reported as having been operated on by him in this manner, viz.: Eight disarticulations at the shoulder, three amputations of the thigh, two amputations of the arm, six amputations of the leg, and two coxo-femoral disarticulations. He recommends this method as having the advantages: 1, of enabling the surgeon to operate with fewer assistants; 2, the avoidance of hemorrhage; 3, obviating the risk of phlebitis from the pressure necessary to control hemorrhage.—*Gaz. Méd. de Paris*, March 29.—*Med. Record*.

IMPROVED GLASS SLIDE FOR MICROSCOPES.—At a recent meeting of the Biological and Microscopical Section of the Academy of Natural Sciences (*Phil. Med. Times*), Dr. D. S. Holman exhibited an improved slide for microscopes, and explained its construction and mode of manufacture. The slide in question is composed of the ordinary slip of glass, but, instead of the customary plain surface, two concave depressions are ground in the upper side, and connected by one or more shallow canals, carefully cut in such a way as to present on transverse section a gradually increasing depth. In using this slide, each excavation is to be partly filled with the fluid under inspection, and the remaining space in each is to be charged with common air; the large thin glass cover being applied so as to seal up both cavities, as well as the communicating canal. The covering glass is retained in position by atmospheric pressure. In this way is secured what is termed a double *thermal pressure chamber*, either division of which can be made to emit a minute portion of its contents through the delicate canal, and pass the same into the opposite depression by means of the sensible heat radiated from a single finger of the operator brought near it for that purpose. The most complete control is thus obtained over even a single red blood-corpuscle, which may be arrested in the canal, held stationary under observation, and actually turned over in the focus.—*Boston Med. and Surg'l. Journal*.

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TORONTO, JULY 1, 1873.

THE DEBATE ON TUBERCLE.

An important paper on the subject of "Tubercle in its relation to Phthisis," was lately read before the Pathological Society of London, by Dr. Wilson Fox, and was the occasion of a long and interesting debate. Dr. Fox proposes to introduce that older use of the word "tubercle," which applied it to the essential pathological elements of every phthisical disease of the lung, no matter what the special history of the individual disease might be. His propositions may be summed up as follows:—1st. That miliary tuberculosis of the lung has not the histological constancy or peculiarity commonly ascribed to it, but exhibits all the products found in active chronic phthisis. 2nd. That all the other products constituting caseous pneumonia, under various forms, are essentially of the same histological structure, and are fairly traceable to the effects of time; that it is impossible, for example, to maintain that pathological distinction between catarrhal pneumonic phthisis and acute miliary phthisis, which is advocated by Niemeyer. In short, he does away with the peculiar nature of miliary tubercle by affirming its essential substance to exist in all caseous phthisis.

He maintains that in all the varieties of phthisis there is the same peculiar microscopic matter, which he denominates "adenoid" tissue, and the various products which may be detected in the more

complicated cases are but the results of inflammation, infection or degeneration, which accompany the true adenoid or tuberculotic process.

In the discussion which followed it was admitted that adenoid growth does occur in every form of pulmonary phthisis; but the speakers were not agreed as to its significance. Dr. Fox did not find any supporters in the view that the so-called adenoid tissue was the cause of phthisis, but the impression seemed to prevail among the majority present that the production of adenoid tissue was rather the result of irritation on the lung tissue. The opinion also found expression among those that took part in the debate, that the arbitrary limitation of the word tubercle to the so-called grey or miliary granulation, introduced by Virchow, could not be maintained, the microscopic appearances usually considered most characteristic of this structure, viz., round cells in a reticulum, being undistinguishable from many similar appearances to be met with,—as for example, syphilitic gumma, lymphoid deposit, &c.

Dr. Bastian was decidedly opposed to the views entertained by Dr. Fox, and strongly recommended the abolition of the word tubercle as applied to miliary granulation. He proposed to substitute the word "granulia" for the word "tubercle." The term granulia (granulie) was first proposed by an eminent French pathologist, G. S. Empis, in 1865. He was among the first to separate miliary disease from caseation and other products of common inflammation. He applied the word "tubercle" and "tuberculisatio" to the latter condition, and sharply defined the difference between it and miliary deposit, which forms the basis of granulia. In regard to the hereditary nature of the disease, Empis is of opinion that acute granulia may arise independently of any hereditary predisposition; and in his essay, relates two cases, in both of which the family history was entirely free from taint. Dr. Bastian, in his remarks, stated, that in his opinion the general disposition to phthisis *might* be either inherited or acquired, but he was careful not to say definitely whether he believed acute tuberculosis or granulia was capable of originating without hereditary taint. The prevailing opinion seems to be, however, that even in cases where it is alleged that no hereditary predisposition exists, a careful examination of the history of two or three generations will reveal some family taint. With reference to the use of the word tubercle, the *London Lancet*,

in an able article on the subject, considers Dr. Fox's propositions as retrograde, and recommends the advisability of retaining the term *tuberculosis* for the general state and *tubercle* for the local change, in this variety of disease. Notwithstanding this, we would like to see the original idea of Empis triumphant, and the word *granulia* for the for the general state and *tuberculisatio*n for the local change, come into general use. We are certainly much in advance of the older pathologists who described grey, yellow, black, and red tubercle as so many different kinds; but there is still room for more definite ideas and a more specific nomenclature than obtains at present in regard to this subject.

THE BEST WAY TO PUT DOWN QUACKERY.

The best way to put down quackery, in and out of the profession, is by educating the people on medical subjects. It is a general belief with the people that it is impossible for them to investigate and understand questions relating to medical science; and this belief has been strengthened by the general bearing of the profession towards the public in these matters. While there is undoubtedly much in our science and art that requires a well trained mind to understand and comprehend, there is still nothing so mysterious and profound in the science and practice of our art but that their general principles may be made intelligible to most people. True there is a great amount of technical language, which it seems difficult to set aside, and without a knowledge of which, on the part of the people, it would be impossible in some instances to properly apprehend the meaning of much that relates to the subject of medicine; but the facts and truths which go to make up its great leading principles may be easily expressed in the plainest and simplest language. Great men find no difficulty in making themselves thoroughly understood in dealing with some of the most abstruse subjects. The large audiences that attended the lectures of Prof. Tyndall were pleased and delighted with his experiments and explanations on the subject of light,—than which, no scientific subject is more difficult to comprehend by ordinary minds. The success, also, which attended the lectures on anæsthesia, lately delivered at Steinway Hall, New York, by Profs. Sims, Doremus, and Hamilton, goes far to show that the

people are capable of understanding and profiting by the exposition of scientific subjects when treated in a plain, simple, and yet masterly manner, such as the distinguished gentlemen just referred to are capable of doing. The people require education on medical subjects. To be continually blaming them for supporting and encouraging quackery, and at the same time refraining from giving them the knowledge by which they may judge aright, is the height of folly and injustice. Our admirable educational system may do much to improve the general condition of the masses in this respect, but it will require some additional assistance in the way indicated before much improvement in medical matters will be observable. The profession owes it to themselves, and to the public, to encourage and even to inaugurate such movements as will enlighten the masses in regard to matters which pertain to their highest interests—their health of body and mind. To relieve pain and suffering is not the only sphere of the science and art of medicine ; it has higher prerogatives and nobler ends : to conserve public health, to increase the duration of life, to give effect to sanitary regulations, and to promote the welfare and happiness of the people, are some of the higher aims. Whatever information the public has hitherto received on medical subjects has been received from quacks, whose only aim was to subserve their own interests, and if the regularly educated man is willing to leave the field to them the profession must abide by the consequences. The conclusion is irresistible that the only correct way to put down quackery is by educating the people on medical subjects, so as to enable them to judge for themselves as between charlatanism and true scientific medicine. We have great faith in the education of the people on such matters, and are happy to see the efforts which are being put forth in some quarters with that end in view.

CAN THE ETHIOPIAN CHANGE HIS COLOR OR THE LEOPARD HIS SPOTS?

This very trite observation has been many times repeated without the remotest idea being entertained that there is any possibility of such a thing occurring ; yet strange, and incredible as it may seem, there are well authenticated cases of the kind on record. A case is

reported, in the transactions of the American Medical Society for 1869, of a negro in the State of Maryland who underwent a complete change of color from a deep black to a clear and healthy white. The change of color commenced about the abdomen and gradually extended over different parts of the body, till at the end of seven years the white had overspread the greater portion of the skin, and in a short time the whitening process was so complete that in point of color he could not be distinguished from a native Anglo-American. It had nothing of the appearance of a sickly or albino hue, as if it had been the result of disease. He was a healthy, vigorous man, and had never suffered from any disease, either at the commencement or during the progress of the change. The change did not proceed equally over the surface of the body, but occurred in patches here and there, and these fused into each other until finally the whole surface was changed. As the change of color took place in the region of the scalp, the wooly hair disappeared, and fine, straight locks took its place. Another most remarkable case was published in the *Philosophical Transactions* as long ago as 1756. This was the case of a negress, a native of Virginia, about forty years of age, remarkably healthy, of a strong and robust constitution, who underwent a similar change of color. Her skin was originally as dark as the most swarthy African. The change first commenced in the parts adjoining the finger nails. Her mouth next underwent the same changes, and it gradually spread over the whole body, and the skin became white, smooth, and transparent, elegantly showing the ramifications of the subjacent blood-vessels. The back and neck retained their pristine color longer than any other part of the body. She also had never been ill in her life, nor suffered from any cutaneous disease, nor made use of any external application by which this phenomenon might be produced. Several other instances are said to have occurred, although there is no authentic record of them.

It is also stated that a portion of the integument of an African, engrafted upon a white person, retains its original color for a short time, but eventually loses its dark color and becomes as white as the surrounding skin.

TREATMENT OF CROUP.—Dr. Welsh (*The Doctor*) recommends the use of iodine in croup. He relates, in confirmation, a successful case treated by one or two drop doses of the tincture every half hour.

AMERICAN MEDICAL ASSOCIATION.

The 24th annual meeting of the American Medical Association met in St. Louis, Mo., on the 6th ult. and continued in session four days. There were present during the Session 448 members. The annual address was delivered by Dr. T. M. Logan of California, after which the usual business of the Session was proceeded with. There were some good papers read to sections and several general reports in regard to education, literature, &c. Among the proceedings a resolution was passed recommending an International Medical Congress, to consider, and, if practicable, adopt an uniform classification and nomenclature of diseases to be used by the profession throughout the world.

A resolution was also passed recommending the establishment of a National Sanitary Bureau with relation to the general government similar to those of the Bureaus of Agriculture and Education,

The following gentlemen were appointed chairmen of sections : Dr. N. S. Davis, Chicago, Medicine, Materia Medica and Physiology ; S. T. Parvis, Indianapolis, Obstetrics and Diseases of Women and Children ; S. D. Gross, Philadelphia, Surgery and Anatomy. - Dr. A. N. Tally, South Carolina, Med. Jurisprudence and Chemistry. Dr. A. N. Bell, Brooklyn, State and Public Hygiene.

Dr. J. M. Toner of Washington, was appointed President for the next year. The next meeting of the Association will be held on the first Tuesday in June, 1874, in Detroit, Michigan.

CLINICAL LECTURES.

The arrangement which was entered into last winter for the regular delivery of clinical lectures in the Toronto General Hospital by the clinical lecturers of the three medical schools in this city was found to work most satisfactorily, and we are happy to announce that the same regulation will be continued during the coming winter session. The amount of clinical instruction thus afforded students attending the Toronto Hospital, is largely in excess of that of any other institution in America, and cannot fail to be of immense practical value to those who avail themselves of it. No additional fees are charged for these lectures, and the Hospital Trustees have opened the way for the attendance of all students, by issuing perpetual tickets for the moderate sum of ten dollars each.

TREPHINING IN TRAUMATIC EPILEPSY.—A successful case of trephining in traumatic epilepsy is recorded in the *London Lancet*, (June 7th) by Dr. Dickson, Guy's Hospital. The patient was a lad aged 16. He received an injury to the left parietal bone four years ago, by a fall. Within a week after the accident the patient had a fit, and from that time until the date of the operation, fits continued to recur at intervals of about a week each. All ordinary medical treatment being of no avail trephining was proposed. The operation was performed by Dr. Bryant, and was attended with immediate benefit, and followed by complete recovery. There was no starring or fracture, but the bone was found very much thickened at the original seat of injury. The boy, soon after the operation, expressed himself as feeling as if a great weight had been removed from his head. Dr. Hodder, of Toronto, had a somewhat similar and equally successful case a short time ago, a full report of which he has promised for some future number.

NEW METHOD OF HEALING ULCERS.—Dr. Nusstaum, in the *Vienna Med. Press*, claims to have treated successfully upwards of sixty cases of chronic ulcers of the leg in the following way:—The patient being put under the influence of ether or chloroform, an incision is made around the margin of the ulcer, extending down to the fascia. Considerable hemorrhage follows, and pledgets of lint are passed into the cuts to arrest the bleeding and also to prevent speedy union of the cut edges. The lint is removed on the second day, and simple water dressing applied until a cure is effected, which generally takes place rapidly; marked improvement being manifested in twenty-four hours after the operation by a diminution of the discharge and a healthy appearance of the ulcer. This rapid change is owing, he says, to the division of numerous enlarged blood vessels, and time is thus given for the lessened nutritive material, previously carried off by excessive secretion to be transformed into cells and connective tissue.

MATRICULATION EXAMINATION.—The matriculation examination of the College of Physicians and Surgeons of Ontario, will commence on Wednesday the 2nd day of July at 9 a. m., in the Toronto High School. A similar examination will be held in Kingston on the same day.

TRANSPOSITION OF VISCERA.—Mr. Nixon (*British Med. Journal*) gives a remarkable example. A boy, aged about 15, died of double pleuritis, on March 7th. The systemic portion of the heart was situated to the right, the pulmonic portion to the left. The arch of the aorta crossed from left to right, passing over the root of the right lung, and the vessel passed down to the right of the œsophagus. The branches were the arteria innominata, right carotid, and right subclavian. The arteria innominata divided into the left carotid and left subclavian at the left sterno-clavicular articulation. The superior vena cava passed in front of the root of the left lung. The left lung was divided into three lobes, the right into two only. The pneumogastric nerves were reversed also, the right supplying the anterior surface of the stomach, the left its posterior surface. The right recurrent laryngeal nerve was given off at the right side of the ductus arteriosus, which sprang from the right and shorter branch of the pulmonary artery. The liver occupied the left hypochondrium, its greater lobe being on the left side. The œsophagus terminated in the right hypochondrium, where the cardiac end of the stomach and the spleen were also found. The intestines, and the vessels and nerves of the abdomen, were all similarly misplaced.

APPOINTMENTS.—Jacques Thelesphore Beaubien, of the City of Ottawa, Esquire, M.D., to be an Associate Coroner within and for the County of Carleton. Robert Gowans, of the Village of Bervie, Esquire, M.D., to be an Associate Coroner within and for the County of Bruce. Hedley Leeming Anderson, of the Village of Clifford, Esquire, M.D., to be an Associate Coroner within and for the County of Wellington. Robert Lawrence, of the Village of Mono Mills, Esquire, M.D., to be an Associate Coroner within and for the County of Simcoe. Dr. Lister, of Belleville, has received the appointment of Surgeon to the forces proceeding to Manitoba, and will shortly proceed to his destination with the force to which he is attached.

DEATH OF TYLER SMITH.—Dr. William Tyler Smith, author of "Principles and Practice of Obstetrics," died at Richmond, England, æt. 59. The London *Lancet* of June 7th has a long obituary on his life and writings.

Dr. Burrows has been re-elected President of the Royal College of Physicians, London.

TWO CASES OF RUPTURED CHORDÆ TENDINEÆ.—Dr. Bristowe (*Brit. Med. Journal*) exhibited two specimens before the Pathological Society, London. The first was from the body of a male, aged 62, who, without any apparent cause, became subject to a cardiac murmur and dropsy. One chorda tendinea was ruptured. The second specimen was taken from the body of a bargeman, aged 21, who received an injury to his back, but went on with his work for several weeks with pain and stiffness of the back and leg. He was admitted with doubtful swelling of the joints. He began to pass his motions involuntarily. A week after admission, pericarditis, followed by a systolic endocardial murmur, supervened. After death, adherent pericardium and several ruptured chordæ tendineæ were discovered. No spinal disease was discovered.

ROYAL COLLEGE OF SURGEONS.—In July next, a revised scheme of examination, which was adopted by the Council in 1871, will commence for medical students who entered on their studies after October, 1871. The new examination will comprise the following subjects: *Anatomy*: Bones, muscles, articulations; and descriptive anatomy of the abdomen, chest, urinary and genital organs. *Chemistry*: Chemistry and physics, as applied to pharmacy and medicine. *Materia Medica and Pharmacy*, not including therapeutics. *Surgery*: Fractures and dislocations. The fees for this examination will be five guineas for registration, and the same amount for examination.—*British Med. Journal*.

THE LATE EMPEROR NAPOLEON.—On Tuesday last Dr. Connean and Dr. Baron Corvisart waited upon Sir William Gull, and presented him, on the part of the Empress Eugénie, with a costly gold box, bearing the Imperial cipher in diamonds. This memento, presented by the Empress through Sir William Gull's French colleagues in recognition of his services, is all the more precious because the box contains a pair of sleeve-links worn by the late Emperor Napoleon.

MEETING OF THE MEDICAL COUNCIL.—The regular annual meeting of the Council of the College of Physicians and Surgeons of Ontario took place in Toronto on the 25th ult., and continued in session three days. Dr. Wm. Clarke was chosen President for the ensuing year; Dr. J. Muir, Vice-President; Dr. Aikins, Treasurer, and Dr. Pyne, Registrar and Secretary. A report of the proceedings will be given in our next number.

TRAUMATIC TETANUS CURED BY NEUROTOMY.—It will be unnecessary to draw special attention to the two following cases ; their importance will be apparent to all. They seem to point to a successful mode of treatment of a hitherto very fatal disease. The first is a case of traumatic tetanus consequent on a crush of the fourth and fifth toes. The wound was followed by inflammation and mortification, which partly yielded to treatment. On the 9th day symptoms of tetanus commenced to show themselves. Prof. Rizzolè, having been called in consultation, discovered a white filament in the wound, which he recognised as a nerve, and which when touched caused intense pain, followed by tetanic convulsions. This nervous filament was excised, and with it departed the pain in the whole of the affected region ; the rigid muscles became relaxed, and the convulsions more and more rare. On the 16th day after the neurotomy the recovery was complete. The nerve, when examined under the microscope, showed several dilated points, due to inflammation of the neurilemma.

The next case is that of a man who received a gun-shot wound in the left forearm. The shot caused severe laceration of the anterior muscles, and finally lodged under the skin near the elbow joint. On the 8th day there was severe hæmorrhage from the bronchial artery, which necessitated ligature of that vessel. On the 10th day an abscess was opened at the bend of the elbow. On the 12th the ligature came away, and there only remained a small fistulous opening. The patient had been going about for eight days when tetanic contractions appeared in the arm, afterwards extending to the whole body. Excision of the N. musculo-cutaneous, was performed by Dr. Marinelli, with such success that in three days the tetanic symptoms had disappeared.—*V. Gazette Medicule Bedge, No. 21, and Gazette Medicule Ital. Prov. Venet. (Med. Press and Circular.)*

DEATH.—In Stouffville, on the 18th of June, J. G. Freel, in the 65th year of his age.

Dr. Freel was a graduate of the Col. of Physicians and Surgeons, N.Y., (1840), and has been practising for many years in Markham, and latterly with his son in Stouffville. He was in the enjoyment of very good health until within a short time of his death ; and the sudden and unexpected change fell heavily upon his family and friends.

THE ADMINISTRATION OF CHLOROFORM.—We have received an interesting article on the above subject from Dr. Coleman, Asst. Surgeon Toronto Eye and Ear Infirmary. It came to hand too late for the present issue, but will appear in our next number.

A NEW RESIDENT.—The following paragraph is taken from the *Brighouse News* for May 24th :—"We learn that the medical profession at Brighouse has just received an accession in the person of Mr. Cecil Alexander Bindley, M.R.C.S., formerly assistant with Mr. Pugh, surgeon. He will reside in Bradford road, next door to Mr. Hepworth, architect. The courtesy and attention which patients received at his hands whilst with Mr. Pugh, leave little doubt that he will be heartily welcomed." It is to be hoped that this paragraph has been inserted without the knowledge of Mr. Bindley.—*London Lancet*.

The above is what may be called a very moderate case, and one that would scarcely be noticed, though of common occurrence in this country. It is important, however, as showing the high tone of medical ethics which obtains in Great Britain as compared with that in some of her colonies.

USE OF MILK IN CANCER OF STOMACH.—The invaluable benefit of milk diet in cases of cancer of the stomach has been forcibly brought out in an instance recorded by the *France Médicale* for August 24. The patient, under the care of Dr. Siredey, at the Hôpital la Riboisière, had not been able for two months to take any kind of food without immediately throwing it up. Milk, in small quantities at first, was then ordered as diet. It was not brought up, and consequently during thirty-six days it was used in any quantities, and without inducing sickness. At the end of this time other sorts of food were given and properly retained.

LACTIC ACID IN DYSPEPSIA.—Dr. C. Handford Jones recommended the use of lactic acid in dyspepsia. He gives it in doses of fifteen to twenty minims in half an ounce of water, to be taken at meal-times. He says it seems to mingle with the food and to supply one of the constituents of healthy gastric juice. It is not well suited to cases in which there is any irritability of the digestive organs; but when this is removed, it may be administered with great advantage. It is also recommended by him in all cases where it is desirable to improve the tone and power of the stomach.

REMOVAL OF TONGUE AND LOWER JAW.—The old man on whom Dr. Hingston, of Montreal, performed this formidable operation in Autumn last, for malignant disease involving both structures, is in perfect health, eats and drinks with ease, and articulates so as to be understood. The operation, so far, is unique.

SUBCUTANEOUS INJECTION OF MORPHIA IN CHOLERA.—Dr. Patterson, of Constantinople (*Braithwaite*), reports that in the late epidemic of cholera at that city, finding all other treatment unsatisfactory, he determined to try the subcutaneous injection of morphia. In the first case a quarter of a grain of the acetate caused relief to the cramps and vomiting in a quarter of an hour, and the skin became gradually warm and moist, and the pulse returned. In ordinary cases he found one or two injections sufficed, in a few three were given, and only once four. He does not maintain that the treatment is a specific against cholera, but that its action is more speedy, certain and effectual than any other tried by him. Out of thirty-two cases in which the treatment had a fair chance, there were only ten deaths.

PODOPHYLLIN IN CONSTIPATION.—Dr. Constantin Paul (*The Doctor*) lately read a paper on this drug at the Société de Thérapeutique, Paris. He considers this remedy one of the most reliable in habitual constipation. He began by combining it with belladonna, as advised by Trousseau and others. He also tried hyoscyamus, but he has now discarded all adjuvants; and with a smile at the polypharmacy of the English physicians, recommends a small dose of podophyllin made into a pill with honey, to be taken every night. In the constipation of pregnancy and uterine disease, he has found it the best remedy, producing a single evacuation each morning. Should there be more effect after a few days, he omits the dose for a night or two.

THE BOWEL LESION OF TYPHOID FEVER.—The generally entertained opinion that the bowel lesion is the result of Nature's efforts to eliminate, is entirely erroneous. Were this true bowel lesion, it would relieve rather than aggravate the constitutional symptoms. The inflammation of the agminated and solitary glands bears exactly the same relation to the fever that the sore throat of scarlet fever does to that disease; that is, it is the direct effect of it. No doubt the sloughs and discharges from the ulcerated glands carry the poison of typhoid fever, and are capable of conveying the disease from one person to another, just as the discharges from the mouth and nostrils in scarlatina are capable of transmitting their peculiar poison.

REPORTS OF SOCIETIES.

BRANT MEDICAL ASSOCIATION.

The usual quarterly meeting of the "Brant County Medical Association" was held in the Kerby Hotel, Brantford, on Tuesday, June 2nd. There was a good attendance of members present, and several visitors from a distance. Dr. Henwood, President in the chair. The minutes of last meeting were read, and, on motion of Dr. Griffin, seconded by Dr. Lawrence, confirmed, with the following additional clause, "it being understood, however, that this association did not, at the last meeting, intend to oppose the whole medical bill, but *chiefly* that part referring to the mode of levying the assessment."—Carried.

Dr. Jones was balloted for, and accepted, as a member of the association. Dr. Kerr, Galt, by invitation, gave an interesting description of a remedy used by himself and others for many years in dysentery and other affections, detailing its ingredients and explaining its physiological action. Its beneficial effects were spoken of in the highest terms by Drs. Lawrence, Clarke, and Bingham, who had frequently employed it in practice, and with the happiest results. On motion, the thanks of the association were tendered to Dr. Kerr. Dr. Philip read a paper upon "Cerebro-Spinal Meningitis," giving the prominent features of the disease as it manifested itself in Brantford. A discussion ensued in which Drs. Bown, Henwood and Griffin gave the results of their observations. Dr. Clarke exhibited a morbid preparation from a case occurring in practice, an occlusion of the posterior cerebral artery, the history of which, from want of time, he deferred giving until the next meeting of the association. It was moved by Dr. Bown, seconded by Dr. Griffin, "that the committee, appointed at last meeting to draw up a tariff of fees to be submitted to the association, report at next regular meeting." After some miscellaneous business had been disposed of, the association adjourned, to meet again in Brantford on the first Tuesday in September.

OXFORD MEDICAL ASSOCIATION.

A meeting of medical men took place in the Mechanics' Institute rooms on Wednesday last, pursuant to notice by circular, for the purpose of forming an association for the county. The meeting was organized by calling the representative of the division in the Medical

Council to the chair. Subsequent to this it was decided to proceed with the formation of an association, and with that view the following officers were elected, viz : President, Dr. D. Clark, Princeton ; 1st vice-do., Dr. Williams, Ingersoll ; 2nd vice-do., Dr. Beard, Woodstock ; Recording Secretary, Dr. Howland, Woodstock ; Corresponding Secretary, Dr. McKay, Woodstock ; Treasurer, Dr. Scott, Woodstock. Upon motion it was resolved that the President and two vice-Presidents be a committee to draft a constitution, by-laws, etc. At this stage of the proceedings a paper on Homœopathy was read by Dr. Turquand, followed by another on "Medical Quackery" by Dr. Clark. Dr. Turquand then introduced the subject of medical evidence in cases of prosecution for malpractice, and spoke in favour of getting together the M. D.'s subpoenaed on both sides previous to meeting at court, that an unanimous conclusion might be come to. Several others spoke a few words upon the question, after which Drs. Clark, Swan, Howland and McKay were appointed a committee to prepare a programme for the next meeting. A motion was then moved, seconded and carried, tendering the thanks of those present to the President elect for his paper on "Medical Quackery," and requesting that it be sent to the medical journal for publication. The meeting then adjourned to the second Wednesday of August.

BOOK NOTICES.

THE PRINCIPLES AND PRACTICE OF MEDICINE. By Austin Flint, Sr., Bellevue Hospital, New York. Fourth edition, carefully revised, 1873. Philadelphia : H. C. Lea. Toronto : Copp, Clark & Co.

This work is so favorably known to the profession in this country that it is only necessary for us to state that a new edition has just been issued from the press. No words that we could add would increase the favor with which it has hitherto been received by the profession. The present edition has been re-written in some parts, and some additions have been made, especially on diseases of the nervous system, but the size of the volume has been increased only about seventy pages. It is still, as heretofore, the most compact, yet comprehensive, text-book on medicine in the English language.

WOHLER'S OUTLINES OF ORGANIC CHEMISTRY. By Rudolph Fittig, Ph. D., Nat. Sc. D., Professor in the University of Tubingen. Translated from the eighth German edition, with additions by Ira Remsen, M.D., Ph. D., Professor in Williams College. 12mo., pp. 530, 1873. Philadelphia: Henry C. Lea. Toronto: Copp, Clark & Co.

This work has already passed through eight editions in Germany. It is devoted entirely to organic chemistry, and forms a complete scientific treatise on this interesting subject. Organic chemistry is commanding more and more attention every day, and lovers of the Science will find much to instruct and amuse them in this interesting volume. Most of the works on chemistry contain a few pages on this subject, but in general so meagre as to be almost worthless. The work is suitable alike to the beginner and to the advanced student. We have no hesitation in recommending the volume to those who are in want of a good text-book on this subject.

INFLUENCE OF THE MIND UPON THE BODY IN HEALTH AND DISEASE; designed to Elucidate the action of the Imagination. By Daniel H. Tuke, M.D., M.R.C.P. 8vo., 400 pp. Price \$3.25. Philadelphia: H. C. Lea, publisher. Toronto: Copp, Clark & Co.

The object of the work, as stated by the author, is to collect, in one volume, authentic illustrations of the influence of the mind upon the body, scattered through various medical works, and to arrange them on a definite physiological basis; and also to show the power and extent of their influence in causing disorders of sensation, &c., and its importance as a practical remedy in disease. It is a very interesting and readable book.

SURGICAL DISEASES OF INFANTS AND CHILDREN. By M. P. Guer-sant, Honorary Surgeon of the Hospital for Sick Children, Paris; Honorary Member of the Chirurgical Society, &c. Translated from the French by Richard J. Dunglison, M.D. Philadelphia: Henry C. Lea, 1873; pp. 351. Toronto: Copp, Clark & Co.

A MANUAL OF CHEMICAL ANALYSIS, AS APPLIED TO EXAMINATION OF MEDICAL CHEMICALS; a Guide for the Determination of their Identity and Quality, and for the Detection of Impurities and Adulterations. By Frederic Hoffman, Ph. D.D. New York: D. Appleton & Co. Toronto: Willing & Williamson.

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Original Communications.

A NEW REMEDY FOR DYSENTERY.

BY WM. KERR, SURGEON, GALT.

(First published in the *Edinburgh Med. Journal*, June, 1865.)

Twelve years ago, an accidental circumstance led me to attempt an improvement in the treatment of dysentery. Commencing with camphor and henbane, added to opium, I experimented on every officinal narcotic, coming to the conclusion, that of these the most efficient combination was one of opium, henbane, hemlock, stramonium, and digitalis. I had cause to be better satisfied with this than with any previous combination; but from time to time failures or tardy success induced the conclusion that something was still wanting,—that something if to be found at all, was therefore to be discovered in plants not yet admitted into the Pharmacopœias. After a long search, *Cicuta maculata*, *Sium lineare*, and *Conioselinum canadense*, indigenous to the swamps and woods of Canada, supplied the deficiency better than any others I happened to try. *Sium lineare* supplanted hemlock (*Conium maculatum*), on account of the combination containing the latter occasionally producing pain in the bowels and failing, while that with *Sium lineare* gave relief; and

dulcamara supplanted henbane, as experience showed it to be better adapted to act beneficially along with the other members of the combination. Its constituents, when the investigation was concluded were as follows :—four officinal, viz., opium, stramonium, dulcamara, digitalis ; three non-officinal, Sium lineare, Cicuta maculata, Conioselinum, canadense. All are more or less narcotic ; and digitalis, dulcamara, and Sium lineare are also diuretic. So many are necessary evidently from each possessing some peculiarity in the way in which it affects the system : the combined effect of these peculiarities being required to combat the disease.

Without opium the combination is slightly aperient, improves appetite, promotes sleep, and, according to experience gained in dysentery and other diseases, heals ulceration of the mucous membrane. In dysentery, opium is necessary apparently to check the frequent motions of the bowels, the strictly curative power depending chiefly, if not altogether, on the other ingredients. In infants generally, and also in a few adults, digitalis does not act favourably. In such instances I have substituted squills with great benefit. Adults generally require the combination with digitalis ; of a very few infants the same may be said ; and to many adults the combination with digitalis, or that with squills, may be given indifferently. Excepting opium and squills, the part employed is the leaf. Digitalis and squills are combined in the proportion of half a part each,—all the others in that of one part. For infants, opium is reduced to a half-part. The usual dose to adults is six and a half grains, digitalis or squills being each half a grain, and all the others one grain each.

Between five and six years were spent in determining the components. Beginning with three, I never afterwards, either in adding or subtracting, changed more than one plant, till I had as fully as lay in my power ascertained the result of each change. In this manner I have experimented on thirty-two plants or their products. I have pulled down the combination, and built it up again, and thus done my best to ascertain the necessity for each component. For upwards of seven years the combination has been used with very great success ; but as my own experience may be suspected of being biassed, I shall confine myself to the reports of others.

Dr. Brown, of Berlin, Ont., had a very severe attack, of which he published an account in the *Montreal Medical Chronicle* for December, 1858.

Of this paper the following is a copy, slightly abridged:—"In August last I was seized with epidemic dysentery. The usual remedies were properly administered—opium, the quantity of which speedily rose to twenty-one and even twenty-four grains daily, together with mercury, acetate of lead, and ipecacuanha, but no amendment took place. I vomited incessantly, and, though tormented with thirst, could retain no fluid. In my case the effect of large doses of opium was prostrating and overpowering. I did not sleep, but could scarcely be said to be awake, except to the consciousness of severe pain, agonizing tenesmus, and frequent vomiting. I had been ten days ill, nature was sinking, collapse was to be feared, when Dr. Kerr visited me. He immediately gave three and a half grains, or half a grain of each of the seven ingredients." (The recipe is here given by Dr. B.)

"I was very restless from a sensation of sinking and severe pain. In half an hour, after dosing a few minutes, I became aware of a great change. I could lie quiet; the distressing tenesmus was less, pain in the body and limbs less severe, the sensation of sinking relieved, a glow of warmth was supplanting the cold of threatened collapse, and an inclination to sleep, not before experienced during my illness, was stealing over me. The first thought was amazement at the change, then a faint recollection of a new medicine crossed my mind, and I resigned myself to its influence. I was immediately asleep, and for an hour and a half had a comfortable and refreshing sleep, unaccompanied, comparatively speaking, with sensorial disturbance. When I awoke all the symptoms were relieved. Seven grains were given every six hours; but the quantity of digitalis being too great, this drug was reduced from a full to a half proportion, making each dose six and a-half grains, which were given every four hours.¹ I spent twenty-four hours, almost wholly in sleep; calls to rise were still frequent, but the tenesmus was less severe, and, though I retched a few times, vomiting ceased. In a few days appetite began to return."

"During twelve years' practice, I never in the treatment of dysentery met with a narcotic to be compared with Dr. Kerr's combination, in relieving general irritability, pain, and, above all, nausea and vomiting. It produces a wonderful degree of comfort, unat-

¹ Prior to this all the ingredients were equal.

tended by sensorial disturbance. From thirty minutes after the first dose was taken my suffering was comparatively nothing. Little hope was entertained of my recovery previous to the first dose, but became sanguine before I had taken the third."² Dr. Bingham, Dr. Brown's medical attendant, in a supplement, vouches for the accuracy of the narrative, and relates six confirmatory cases from his own experience.

Dr. Bingham, supplied with medicine by me, treated successfully the sporadic cases which occurred in the following years:—In August, 1862, he, with Dr. Bell, by this time his partner, applied to me, making the following statement:—Dysentery had broken out epidemically in their locality, but not having any of my medicine, they had treated it with the usual remedies; a woman had died the preceding evening, her husband was dangerously ill, and other two were apparently dying. Furnished with a supply, they hastened to their patients. The husband just mentioned, though previously ill for five days, was relieved in less than an hour, and had a rapid recovery. One of those believed to be dying recovered readily, though upwards of seventy years of age; the other died, time to administer a single dose only being afforded. During the remainder of the epidemic there was not a death, though, judging from the severity of the attacks, six or seven would have proved fatal under ordinary treatment. In the autumn of 1863, dysentery was again epidemic at Ayr, Ont., where Drs. Bell and Bingham resided. Without delay they applied to me for medicine, and treated successfully every case; while the only other medical gentleman in the same village adhered to the ordinary treatment, and out of a smaller number of patients lost five by death.

Dr. Mackintosh, of Hamilton, Ont., has employed the combination in dysentery since 1861, and in all cases with success. From his notes I give the following account of the epidemic and generally severe character of the attacks:—

"1864, 15th July.—A child, four years of age, seized two days ago, bloody stools every half hour, accompanied with vomiting and severe pain. Applied hot fomentations, and gave three grains of the squill combination with opium every four hours. These were speedily followed by relief; the child had a pretty good night, and on the 19th is reported quite well.

² The possibility of any future report from Dr. Brown was cut off by his accidental death a few months afterwards.

" *17th July.*—A girl in the same house, nine years of age, was seized during the night with severe dysentery. Applied hot fomentations, and gave five grains of the digitalis combination with opium every three hours. Immediate relief followed, and next day she was convalescent. Six doses in all were given.

" *22nd July.*—A boy, seven years of age, seized yesterday, and now severely affected. Gave three grains every three hours, and by evening he was much relieved. Nine doses completed the cure.

" *6th August.*—A man, aged thirty, attacked during the night with rigors and vomiting, followed by dysentery. In the morning seven grains were given every three hours. In two days he was quite well.

" *12th August.*—A man, aged sixty-four; bloody motions every half-hour, with nausea. Same doses given as to last patient; next day almost well.

" *15th August.*—A woman, aged fifty-six, during the night was attacked with severe dysentery. Same doses given. By evening was much better; and by the third day complained merely of weakness.

" *17th August.*—A woman, suddenly seized with very severe dysentery, visited shortly after; she was then cold and faint, and stools passed without control. Gave seven grains of the digitalis combination, with one-fourth of a grain of morphia (instead of opium), every two hours. After the third dose relief was so great that morphia was altogether omitted, but seven grains of the other combination were continued thrice a-day.

" *19th August.*—Almost well."

Dr. Philip, of Galt, late assistant-surgeon, H. M. 18th Regiment, has furnished me with the following statement:—"Your remedy was administered by me in six severe, besides a number of slighter cases of dysentery during the autumn of 1862. Relief was uniformly obtained after one or two doses, and recovery completed within a few days. One of the cases was characterized by profuse sanguineous discharge, and, occurring in a delicate female, would probably have proved fatal but for the timely administration of this medicine. In contrasting the success of treatment in these instances with the fruitless and unfortunate attempts made by myself and others at relief in the severe dysentery of the Crimea, it is impossible not to be struck with the readiness and efficacy of this remedy. Every

known system of treatment, I believe, was tried there, and the medical history of the campaign shows with how little benefit. Many of the cases which in the Crimea ended fatally were not apparently of a more severe character than some of those which yielded rapidly to your medicine."

Dr. Merritt, who at the time the following occurred was chief of the Medical Department of the Confederate Army of the Mississippi, thus writes to me :—"In August, 1863, when in charge of Camp Jackson, I came into possession of a quantity of your medicine for dysentery. The rapidity of relief and of cure was exceedingly striking. The men were on their feet in a few days, and in the worst cases I did not give more than eight doses of six grains each. My supply lasted ten days, and was administered to about sixty patients, only one of whom died. For some time before I obtained the medicine the deaths ranged from one to three daily, and as soon as it was all expended the mortality resumed the same rate."

A child of the Rev. Mr. Robb, Calabar, Western Africa, in the latter part of July, 1863, was seized with dysentery. At this time the favourite treatment at the mission was large doses of ipecacuanha ; but the illness resisted every prescription of Dr. Hewan, the medical attendant. By the middle of August the child was so reduced, and death so impressed on the visage, that recovery was regarded by all to be hopeless. At this juncture the parents recollected a packet of the combination which I had given to them. After the second dose the child awoke from a refreshing sleep, easy and tranquil, and the medicine being continued, recovery went on rapidly, without a single untoward symptom. A second attack of dysentery, a few months afterwards, was stopped in a single day. A native African was cured of what threatened to be a severe illness by ten doses.

Fifteen medical men besides myself have used this combination in dysentery ; it has been given in the warm region of California, amid the privations and discomforts of a camp in the hot summer of the Southern States, at sea on the Atlantic, in the tropical and pestilential climate of Calabar, and there is a remarkable uniformity in the testimony of all. Relief generally in an hour, restoration to health in a few days, and the great majority cured within a week. A few cases were a little tedious, and a still smaller number lingered for three or four weeks ; none lapsed into chronic dysentery ; and out of about *four to five hundred patients*, though several of the

attacks were very severe, as severe as some of the reporters had ever witnessed, *only four died*. One of these was a delicate child; the second, an infant on whom the medical attendant had previously exhausted all the ordinary medicines; and the third and fourth have not been specially reported to me. I have been told of some instances, and a few have occurred in my own practice, of that generally fatal variety of dysentery characterized by profuse bloody discharges, usually attended with severe pain, all of whom were cured without difficulty. The combination fails in chronic diarrhœa, possibly because this disease is usually unaccompanied by lesion of the mucous membrane. I have not seen or had reported to me any disagreeable effect from this remedy, though, judging from the character of its constituents, such is possible, were the doses unreasonably large. The *medicinal* power is certainly greatly increased by the combination, but not the *poisonous*. Relief speedy and great of pain, far sounder and more refreshing sleep than that from opium, and cessation of discharges, are the usual effects. The nearly uniform success has not given either my correspondents or myself opportunities of trying the treatment by large doses of ipecacuanha.

In the course of my experience, several persons afflicted with chronic dysentery have been restored to health,—some by the combination containing opium, others by that without. Dr. Ogden, lecturer on *Materia Medica*, Toronto, tells me of a case of acute dysentery where, from idiosyncrasy, opium disagreed, but which was speedily cured by the combination, leaving out this drug.

Cases of cholera infantum have been reported to me by medical friends as treated successfully by the combination containing opium. Of summer cholera I select the following on account of its severity. A young man was seized during the night, and visited by Dr. Bingham in the morning. At this time he was violently cramped, skin cold and clammy, voice husky, and pulse feeble. Eight grains of the combination containing opium were given; from this time he vomited no more, a glow of warmth (as in Dr. Brown's case of dysentery) supplanted the cold of threatened collapse, and cramps rapidly abated in severity, though all day he had muscular twitchings. Four more doses completed the cure. Summer cholera has been for some years a rare disease, but all treated by my medical correspondents or myself have readily recovered.

(2nd paper, published in 1867.)

I may here mention, that I find I have not stated with sufficient clearness in my first paper that, in a very few adults, the digitalis combination altogether fails, and that with squills succeeds, and *vice versa* in infants.

Dr. Mackintosh, of Hamilton, Ont., sends me the following cases :—

"No. 1.—12th July.—An adult ; mild form of dysentery, very speedily relieved, and in three days cured. He then went to another part of the country, and about a month afterwards had a severe attack of the same disease, which, notwithstanding the assiduous use of Dover's powder, and starch and laudanum enemata, did not entirely cease for three weeks.

"Nos. 2, 3, 4, 5, and 6.—All in one family, between 22nd and 31st July.—No. 2. A delicate boy, 8 years of age, had been ill for nearly a week ; strength much reduced ; motions frequent and characteristic. Speedily relieved, and in about a week cured. Nos. 3 and 4. Aged 6 and 4 years. Seen in the incipient stage. They were speedily relieved, and a few doses restored them to health. No. 5. The father, aged 50. Taken ill on the 28th July, when he was obliged to leave his workshop. Motions frequent and characteristic. The acute symptoms were relieved by the 31st, but, from intemperate habits, the disease remained in a chronic state for about two weeks. No. 6. A daughter, aged 18, who resided out of Hamilton, paid the family a visit, and next day was seized with dysentery in her own house. Cured by six doses.

"No. 7.—26th.—A woman, aged 35. Two days ago illness commenced ; symptoms somewhat severe. Medicine was given in the usual form, and by the 29th she was quite well.

"No. 8.—27th.—Child, aged 30 months ; motions frequent, bloody and characteristic. 30th. Much relieved. In a few days cured.

"No. 9.—6th August.—An adult ; ill for two days ; symptoms somewhat severe. Relief speedy and effectual. 15th. Cured.

"No. 10.—7th.—A woman, aged 49. Has for years been ailing with ulcers of the mouth and tongue, and severe dyspeptic symptoms. Two days ago attacked by severe dysentery. 8th. All the symptoms less severe ; last night slept well, a comfort she had not enjoyed for two nights previously. 13th. Cured. Latterly the

medicine was given without opium, and she now states that her old ailments are much lessened, and expresses her conviction that the continued use of the medicine will restore her to health. Have not since seen her. *

"No. 11.—*9th*.—A child, aged two years. Has been ill all summer with diarrhœa, which has now become severe dysentery; he is very much reduced. Three grains of the squill combination to be given three times a-day. These mitigated all the symptoms, and at the end of a week he was so much improved that the medicine was discontinued. *28th Oct*. He is now a plump, healthy-looking child.

"No. 12.—*10th*.—A delicate woman, aged 27. Ill a day and a night. Relief speedy and permanent. *11th*. Cured.

"No. 13.—*14th*.—A woman, aged 38. For the last three or four days moderately ill, but much worse to-day. *17th*. Considers herself well. No relapse.

"No. 14.—A child, aged 14 months. Moderately severe attack. Cured in five days.

"No. 15.—*28th*.—A child, aged 2 years. Very much the same as No. 11. Almost every remedy had been tried by the family physician. In a week, under the squill combination, the evacuations became natural. *3rd Oct*. Well.

"No. 16.—*7th Sept*.—A boy, 3 years of age. Relief speedy and permanent. *15th*. Cured.

"No. 17.—*8th*.—A woman aged 28. Ill for about a week. Several domestic remedies had been tried, but without alleviating the symptoms. Three doses of the digitalis combination gave great relief, and procured sleep. *12th*. Cured.

"No. 18.—*14th*.—I never before saw a patient recover from so severe an attack as in the case I am now to relate. A man, aged 45, called at my house, stating that he had been ill for a day or two, and that he had got much worse this afternoon; he hoped, however, by warmth and rest in bed, together with domestic remedies, that by next morning he would be better, and therefore declined medicine. *15th*. At seven o'clock a.m. he sent for me, and on my arrival stated that he had been exceedingly ill all night, having been out of bed every ten minutes, and every motion accompanied with excruciating pain and tenesmus. I directed six and a half grains of the digitalis combination to be given every two hours. In less than two hours,

that is before the second dose was taken, pain was much diminished, although the frequency of the motions was still considerable. By the second day these were reduced to one every three or four hours, instead of every two. On the first night of my treatment, the patient slept well, but not on the second; and on the third, the motions having still a dysenteric character, and still occurring every three to four hours, he had delirium* and illusions, resembling delirium tremens, but there was no tremor of the tongue or other part of the body; the pupils were uniform and rather dilated; the tongue somewhat furred and dry; and there was a tendency to cold sweats. On the whole, I am of opinion that this state was caused by the action of one or more components of the medicine, which was intermitted for a time; but it was three nights before sound sleep was obtained. The patient remembered his hallucinations, and at first could scarcely be persuaded that they were unreal. Dysentery in the present case assumed a chronic form, the only instance, in my experience, of this occurring with your medicine; and after a fair trial, I substituted a mixture of sulphates of quinine, copper, and morphia, with good effect.

"No. 19.—*16th*.—A child, 2 years of age. Chronic dysentery with vomiting, which last was removed by the first dose of the squill combination. The dysenteric symptoms gradually improved, and in a week he was well, and gaining flesh.

"No. 20.—*18th*.—A woman, aged 40. Moderately severe case. In five days cured by the digitalis combination.

"No. 21.—*18th*.—A woman, aged 37. Severity of the symptoms very much the same as the last, but the cure was protracted to fourteen days by errors in diet.

"No. 22.—*13th Oct*.—A boy, aged 4 years. Ill for more than a week. Motions very frequent and bloody. Cured in ten days.

"No. 23.—*15th*.—A girl, aged 14. A severe case. All the symptoms were gradually relieved.

"During the epidemic a number of slighter cases occurred, which do not require special notice.

"I may state that all above two or three years were treated with the digitalis combination, except in one or two instances, where it produced a depressing effect on the pulse, and all below these ages

* Digitalis was the probable cause of delirium; the squill combination ought to have been substituted.

with that with squills. To adults, the dose was usually six or seven grains three or four times a-day, according to the urgency of the symptoms; and in the greater number of instances, the total doses did not exceed six. In the cases under three years of age, the doses varied from one and a half to three grains (the quantity of opium in this being only half of that for adults). To the adult who became delirious, not less than six grains of digitalis, and twelve of the other ingredients, were given in the first twenty-four hours, and continued to be given at this rate for twelve hours longer, a quantity in the same space of time far exceeding any I have ever given.

"In all instances, and I can now speak from an experience of five autumns, the transition from what may have been excruciating suffering to comparative ease was speedy, and usually accomplished by one or two doses. Sleep, to which, from their distress, some of them had been strangers for several successive days and nights, came with relief to pain, and a tolerably sound night's sleep has often been pleasingly contrasted with a day of agony. In conclusion, with the single exception of the man who became delirious, the medicine produced no disagreeable effect in any instance, the patients being sensible only of relief. I have likewise to say that all have recovered."

Dr. Ogden, lecturer on *Materia Medica*, Toronto, writes:—"Last autumn, two or three of the most severe cases of dysentery not yielding to the ordinary treatment fast enough, if at all, I used your medicine with the utmost satisfaction to myself; and in one case, which two medical men had given up as hopeless, to the astonishment of some Boston practitioners who happened to witness it."

This season dysentery was not epidemic in Galt, but the following severe sporadic case occurred to Dr. Philip:—"A mulatto, aged 54, a habitual drunkard, had suffered under this disease for a week, during which time he was altogether neglected. Dr. P. found him dangerously ill; fever was high, severe tormina, and tenesmus, constant calls to rise, and every quarter of an hour motions consisting of mucus and large quantities of blood. Great relief after four doses; recovery gradual, though slow."

Dr. MacIntyre, of Hespeler, in this county, used the combination in dysentery in the autumns of 1864 and 1865. In the former of these years only a few cases, not of special importance, occurred; but in 1865 his locality was visited by a severe epidemic, other practitioners losing numerous patients. He made trials of

chlorodyne, which were successful in the slighter cases, but not in the severe ; these readily yielded to my combination, which Dr. M. soon came to use exclusively, and out of about sixty cases, fifteen of which were severe, not one died. Among the worst was the following :—A man, of 65 years of age, had been ten days ill, attended by a medical gentleman, who trusted chiefly to opium and alum, the former being given to the extent of sixteen grains daily. There was, however, no relief, and the medical opinion being that death would occur in about twelve hours, Dr. M. was sent for. At this time the motions were frequent, and apparently of pure blood ; pain was severe, accompanied by restlessness and much anxiety ; he had scarcely slept since the illness commenced ; weakness was so great that he could not be raised without danger of fainting, and the skin was cold and clammy, apparently justifying an unfavourable prognosis. Dr. M. gave eleven grains of the combination, containing one grain and three quarters of opium. In less than an hour the patient said that a great and beneficial change had come over him, anxiety, restlessness, and pain had much diminished, and he felt that recovery was not only possible, but probable. Eight hours elapsed before another dose was given, now followed by a long and sound sleep. He was able to go out of doors on the eighth day, nine doses in all having completed the cure. I may say, in a few words, that Dr. M.'s cases confirm what I have elsewhere stated respecting great and speedy relief of pain, procurement of sound and refreshing sleep instead of restlessness, and also of rapid recovery.

Dr. Orton, of Fergus, towards the close of a severe epidemic, from which numerous deaths had occurred among his patients, having heard of Dr. MacIntyre's "marvellous success," applied to me, and subsequently treated five severe, and a somewhat greater number of slight cases. There were no more deaths, and in every instance recovery was speedy,—two or three doses being usually sufficient to produce complete cessation of pain and tenesmus, and procure quiet and refreshing sleep. In one case, the patient being 60 years of age, and several days ill, latterly with bloody mucous evacuations every half-hour, the first dose relieved him from all painful and uneasy symptoms, and procured a comfortable sleep, which he had not enjoyed for four or five nights previously. The fatality of the disease, thus stopped in Dr. Orton's practice, continued unabated in the hands of neighbouring practitioners.

Dr. Stillé, Otsego County, New York, applied to me in consequence of the prevalence of a severe epidemic of dysentery, "accompanied by frequent bloody evacuations, great prostration of strength, and cold clammy perspiration, which had proved very fatal under all kinds of treatment." A month afterwards, he writes, "that he had used my medicine with great satisfaction; that he had given it in a considerable number of very bad cases, some even *in extremis*, and uniformly with success."

Dr. Eurrs, Union City, Michigan, says that "when he first obtained my medicine he had two patients with dysentery, brother and sister, aged respectively 12 and 13. They had been for several days under treatment; the evacuations (mucus mixed with considerable quantities of blood) were so frequent, and the tenesmus so severe, that they could with difficulty be retained in bed; at the same time they had violent fever. The severity of the symptoms, and the failure of other remedies, made *the prognosis very unfavourable*." Dr. Eurrs immediately gave each three and a half grains, and directed the dose to be repeated every four hours. At his next visit, twelve hours afterwards, he was "greatly surprised and pleased to find his little patients much relieved." The same remedy was continued at first every four, and by-and-by every six and eight hours. The girl in three, and the boy in four days were convalescent. Dr. Eurrs had no more cases, as the epidemic now ceased.

Dr. Bell, of Ayr, Ont., saw, in consultation with Drs. Rounds and Patten, of Drumbo, a woman who had been confined about a week previously, and who, about thirty-six hours before his visit, had been seized with severe dysentery. The evacuations were mucosanguinolent, and occurred at such short intervals, that she could scarcely be retained in bed. Pain and tenesmus were intense, and vomiting added to the distress. The pulse was exceedingly frequent, and on account of weakness could scarcely be numbered. She had been treated with opium and calomel, without the slightest relief. Seven grains of the digitalis combination were immediately given; in an hour she was decidedly easier, and the pulse less frequent. She was cured in a few days by seven doses, or forty-nine grains in all. Another patient, a man, was seized with severe dysentery. On account of the loaded state of his tongue, calomel and castor-oil were given, but without relief to the dysenteric symptoms. He had frequent mucosanguinolent evacuations, accompanied with severe

pain, tenesmus, and vomiting. The first dose, seven grains, speedily gave relief, and eight doses in all, or fifty-six grains, completed the cure.

Dr. Bingham, of Ayr, Ont., who has used the medicine for eight years, a longer period than any other practitioner, thus writes me :— “I lost many patients with dysentery before I became acquainted with your remedy ; but from that time till last autumn I did not lose one. In this period there were several epidemics, and I treated many, not a few of whom laboured under the worst forms of the disease— In the early part of last season dysentery predominated ; but as autumn advanced, the character of the epidemic changed to summer cholera. Under a calomel and opium treatment, in the hands of others, these cases were certainly formidable ; yet, under your remedy, my patients got rapidly better, and were soon well. Out of about fifty or sixty having dysentery or summer cholera treated last season, two died,—one, an infant, had dysentery with convulsions, whom I first saw about twelve hours before death ; the other, an old woman, with summer cholera, in whose case I abandoned your medicine, because it was rejected by vomiting.” (It might have been given in an enema.) “In conclusion, I am justified in saying that my confidence in your combination is unbounded, and, to me at least, severe epidemic dysentery has long ceased to be a name of terror.”

The successful treatment of so many severe cases of dysentery, and of several of summer cholera, suggests the applicability of the medicine to a more terrible malady,—Asiatic cholera. Having made this suggestion, I must leave its determination to those who have opportunities of treating that formidable disease.

BRAEHEAD HOUSE, GALT, ONTARIO.

MEDICAL QUACKERY.

BY D. CLARK, M.D., PRINCETON.

The word hypocrisy means a man with a mask on his face. This disguise is of a negative as well as of a positive nature. It makes the wearer appear what he is not, and hides what he is. This masquerade is too common in every-day life, and has become the warp and woof of impulse and motive, in every grade of society.

and under all circumstances, until public faith in man's integrity has not that tonic it would be desirable to witness, and which may predominate in "the good time coming." Medical practice is not free from this tendency to deception, which may be classified into two species of the one genus of humbug and deceit :—1. Deception through ignorance. 2. Wilful delusion. The first of these was prevalent in former times, when astrology, alchemy, necromancy and witchcraft had full sway over the myriads of humanity. The relationship between the stars and human destiny (including diseases) were dogmata, to deny which included bitter persecutions, ostracism, and even martyrdom. The almanacs of A.D. 1873 perpetuate this superstition on their title-pages, in the picture of a nude, well-developed man, with the parietes of his bowels cut away, and all the signs of the Zodiac drawn in peculiar and particular relationship to different parts of his body. Lilly, "a medicine man" of 1647, says of these symbols, in conjunction with man, "There is nothing appertaining to the life of man in this world, which in one way or other hath not relations to the twelve houses of heaven; and as the twelve signs are appropriate to the particular members of man's body, so also do the twelve houses represent not onely, but several parts of man, but his actions, quality of life and living; and the curiosity and judgment of our forefathers in astrology were such as they have allotted to every house a particular signification, and so distinguished human accidents throughout the whole twelve houses."

This figure of humanity, and its various and grotesque surroundings of animate and inanimate creations, had its origin in Egypt, belonging to its ritual, as found in the papyri of the land of the Pyramids. Even the *R*, used in prescriptions to this hour, and written with a dash across one of its legs, being supposed to be the initial letter of "recipe," is only the astronomical sign of Jupiter—*♃* slightly changed in shape. The lunatic is still thought to be periodically affected by the moon, and the word itself perpetuates the error. The alchemists sought for many centuries to find out "the elixir of life," or to discover "the philosopher's stone," in which was immortality, and in the meantime recommended the greatest abominations as remedies and cures for "all the diseases flesh is heir to"—from mummies' dust to dried toad—from pickled spider to the fluid extract of bug—and from snake poison to flavored pus. Paracelsus has left to posterity a valuable ointment with which to anoint, not

the wound, but the instrument inflicting it:—"Take of moss grown on the head of a thief who has been hanged and left in the air, of real mummy, of human blood still warm, each one ounce; of human suet two ounces; of linseed oil and turpentine three ounces. Mix well, and anoint the sword or other instrument with it." Kircher, of the last century, had an ingenious and novel, if not successful way, of reducing hernia. The kind of rupture was of secondary consideration. He applied a poultice of iron-filings outside, opposite the part affected, and gave to the afflicted, internally, ground or granulated magnetic iron, a scruple every two hours. The *modus operandi* was supposed to be, that when these metallic ingredients came near to each other, the magnetic metal drew the hernia inwards, while the other was applied so as to pull it vertically, or laterally, as might be deemed necessary, and thus a cure was effected. Sir Kenelm Digby, secretary to Charles I., tells us how much faith that gay king had in so-called "Sympathetic Powders," and how efficacious they were as cures and antidotes. These powders were not taken as medicine, nor applied to parts affected, but to the blood of wounds, or to the excretions of patients, and by a sort of spiritual reflex influence, the sick recovered. Lord Bacon, in his "Natural History," testifies to their power in this way, so that it seems great men have a weakness in hobby-riding, as well as many a poor son of Æsculapius. The potency of charms of all kinds—of the laying on of hands—of the cure of eruptive fevers by wrappings of scarlet cloth—of the cure of lung disease by eating the lungs of foxes and other long-winded animals—of swallowing gold in its native state, and expecting this "aurum potable" to act as a prophylactic against evil spirits; of equal absurdities, whose name is legion, are all evidences of the credulity of the physicians and people of "one hundred years ago." Then, we had the poor victims of somnambulism, epilepsy, trance-waking and trance-sleeping, who thought themselves possessed of the devil—were believed as being such by others—were anathematized and graciously put to death, after being put to the proof by medical and judicial tests such as would put to the blush chirurgeons and chief justices of to-day, and make humanity shudder to contemplate in the blaze of knowledge of this wondrous age. Mesmer had much medical truth, as a substratum on which to build the efficacy of his rubbings, frictions and manipulations, and although mesmerism is surrounded,

even at the present time, by many absurdities, yet magnetic, galvanic or electric influence is potent for good or evil to humanity ; and this subtle fluid (or rather, let me say, this something,) may not only be the connecting link between soul and body—the *tertium quid* of philosophers—but an all-pervading, interstitial substance, which is an indispensable condition of all existences, except the First Great Cause of all. Chemical affinity, cohesion, gravitation, cell-building and selection of plants, the assimilation of animals, brainal molecular action consequent on thought, and the mighty influence which binds the planets as they roll “to the music of the spheres” in the King’s highway, with unerring exactitude, has many phases in its manifestations, but is, in itself, “one and indivisible.” The intimate relationship existing between mind and body—between the ego and non-ego—in thought, volition, emotion, passion and desire depends, in their dual, or rather tri-existent relations, at least in our mundane state, on its magic power ; yet this potency has, from early ages, been made the tool of charlatan, alchemist and slippery imposter. We know that light, heat, motion and electricity are correlative forces, the one producing the other, and only being changed in phenomena and intensity. I need not say that all these agencies are now, and will be to a greater extent in the future, most valuable auxiliaries in the practice of therapeutics. We know not what this multiform substance is, but we perceive its workings around us, and we conceive its active nature in sensations and cognitions, in every acknowledgment of perceptive consciousness. This field is only partially explored. In it is a “wilderness of harmony” which no human *voyageurs* have been able to reach with human intellect, and which must be reached before the healing art can rise to an inductive science. So far, ignorance has, by the wildest hypothesis, used its manifestations to delude the unwary, and to “play fantastic tricks” on the credulous and unguarded public ; but the researches of giant minds are reaching beyond the confines of “this pent-up Utica,” and some day the world will be startled at the strange news from this far country.

So far we have learned that all such agents are to be used with caution and prudence, seeing how little we know of their operations as curative instruments. The specialist may use them to astound his patients, or the ignorant may employ them, if he knows not what else to do, and feels that he must appear to endeavor to alleviate

the distressed ; but our duty is to "read, learn, and inwardly digest" all the researches of men of science, until we find a "more excellent way."

Allow me here to refer to the abominable and disreputable practice of parading our art or attainments before the public, or allowing it to be done with our consent, as in patent medicine advertising, or in the publishing of pamphlets and books full of self-praise.

"Every city, town and village swarms with ignorant pretenders to medical skill.

"It has become quite fashionable among the fraternity to get out a book having reference to special diseases.

"As many of the empirics who profess to write these books can scarcely write their own names—much less compose a grammatical or metaphysical article—they usually employ some literary scribbler to get up a volume to order.

"These works are of the most incongruous, immoral and wishy-washy character, save when they are pirated bodily from the writings of some educated physician.

"Some of these individuals assume the names of distinguished men ; others use the cures of reputable practitioners as their own. For instance, see how many use Lallemand's reports of cases. *verbatim et literatim*, as cures effected by themselves.

"The man who advertises as 'the Retired Clergyman' is no clergyman at all ; the 'Fellow Sufferer' is an old dodge revived ; the Humanitarian 'Association' is simply an individual who knows as much about medicine as he does about Sanscrit. All are uneducated charlatans, and those who are led to believe their assertions will be terribly deceived."

The press is a good medium for such a display, and to those who are in the habit of reading the newspapers from all parts of the Dominion, it is astounding to see how much of it is done, and how disgusting it appears to all but the hero of the hour, and should to him were he not pachydermatous.

Let me introduce an example. The editor of the Quoitville "Tooting Horn," had the pleasure of being present at a splendid surgical operation performed by Dr. Octavius Cæsar, on an afflicted patient, and which proved a complete success. The surgery consisted of the excision of a part of the normal but inconvenient

growth of the horn-like envelope of the great toe. The learned scientific gentleman commenced by making an incision into the north-west angle of said outgrowth," be the same more or less," and cutting in a crescentic direction across the obnoxious and extrusive part. The amputated section being convaco-convex on its edges and sides. Strange to say, this operation was dexterously performed without the loss of a drop of blood. We cannot say which to admire most, the endurance of the patient across whose firmly compressed lips, no murmur of complaint, or exclamation of pain passed during the trying ordeal, or the skill of the surgeon in bringing such a dangerous and delicate operation to so successful an issue. The paring of a big toe-nail is an historical event in the annals of surgery. Exchanges please copy and send their accounts to Box 1037, Quoitville for payment. Here is another *rara avis* of the same flock, with only the pin feathers on to unmask the real genus of a brood of cackling bipeds, prolific in incubation, in other yards besides that of Barnum. Magnum Bonum, Esq., M.D., of Demerara Collegiate Institute, and medical, astronomical, and hygienic *Receptaculum* for the training of graduates over the *Pons Asinorum* of science, art and medicine, respectfully begs to inform the public that he has commenced the practice of his profession in Hardscrabble. His previous experience in the multifarious departments of his profession for nearly have a century; his uniform success; his thorough acquaintance with all the systems of medicine in the world; his willingness to adopt either, or all, to suit his patients; his special and unique treatment of diseases in all parts of the human system, whether chronic or acute, being learned from the greatest medical Savans in Christendom, as well as from the aborigines, after a residence among them of ten years; his knowledge of all recent mechanical appliances, remedies and tests to hydra-headed afflictions of humanity; his urbanity of manners, politeness, suavity, and gentleness produce salutary effects upon the most nervous females; and his ardent desire from the welling depths of his heart to benefit his fellow-men, independent of all pecuniary considerations has been the aim and object of his life. Medicine, advice, and attendance to the poor free!! Special attention given to diseases of the *spleen*, now raging as an epidemic. The patronage of an intelligent public is respectfully solicited.

This may be said to be a burlesque on some ardent and erring

brother of a noble profession. To some extent it is so, but our press teems with such experiences of nauseating laudation. In Ontario to-day, can be found graduates of our medical schools, who say virtually to patients and their friends, in domestic clinics, that *e.g.*, "milkleg is a disease, in which milk goes into the veins, and if they were opened, the lacteal fluid would pour out," or "that scorbutic glands contain cheese, from the patient drinking too much milk of a bad quality," or "that coagulated blood is part of the liver vomited, when ejected from the stomach" or "that the lungs are in a bad way, but the 'lights' are sound as a bell" or "that a black cat's skin with a white tip to its tail is a sure cure for divers inflammations, and is doing good, if it has a putrid smell, after lying against a hot skin for ten or twelve hours," or "that tying woolen strings around the thumbs and toes will stop post-parturient hæmorrhages." These, and dozens of other catch-penny phrases, and absurdities are current with the same earmark and brand of duplicity, cunning and quackery. I dare not say these utterances are those of ignorance, or hypocrisy, or deception, for these *magi* are legally qualified to instruct and enlighten, in the healing art, the *ignobile vulgus*, and are they not "all honourable men?" No polite name can be found to stigmatize my abhorrence, condemnation, and contempt of such jugglery, and unmitigation nonsense in the practice of our profession.

Another species of quackery is that of being *untruthful* to our patients. It is said that "speech is silver, but silence is gold." To magnify a disease to our patients, beyond what we know it to exist, in order to procure credit for miracles in almost restoring the dead, is falsehood. To hold *in terrorem* over the heads of the afflicted, diseases whose names are legion, when, it may be, we are either ignorant of what is the matter, or know that *one* disease is the central and exciting cause or occasion of myriad signs and symptoms, is not honest. To promise a complete panacea for all ills absolutely, except in regard to the few specifics of our *vade mecum*, is an *ignis fatuus*, which "leads to bewilder and dazzles to blind." To pronounce a case desperate from imperfect knowledge, or "malice aforethought," or as capital to speculate on, that if healed by the recuperative powers of nature, or in conjunction with appropriate remedies, in order that "all hail! great son of Æsculapius! may echo and re-echo over every hill, and in every valley of a country side, is cruelty to the sufferer, and arrant hum-

bug in the prognosticator. At the same time, let us be honest and faithful to the dying, not holding out any false hopes, until they launch away. We would ask it for ourselves, so let us not in that trying hour, withhold candour of speech from others, until those who look out of windows are darkened, the golden bowl is broken, and a spirit is surprised into eternity. Our aim should be to render a leal and true confession in regard to the state of those whom Providence has doomed to die, and who read in every lineament of the physician's face, and in every accent which drops from his lips hope or despair. "While there is life there is hope," passes for an aphorism ; but to many it is "a cunningly devised fable," and proves in too many instances a delusion and a snare. I am well aware that medical men are not perfection, but the golden rule is as applicable in our profession as in all other legitimate occupations. The public is far from being grateful to its best benefactors, but an approving conscience is never unkind. We are appealed to with great fervor when danger is near, and a strong affection is apparent when disease, or it may be death, is tugging at the heart-strings ; but when rosy health returns, in many cases sarcasm, irony, and often bitter invective take the place of endearing epithets and words of eternal friendship, especially when bills are presented. Enricus Cordus, who died A. D. 1535, doubtless told his own experience, as well as that of his apostolic succession, in the healing art :

"Tres medicus facies habet : unam quando ragatur,
Angelicam ; mox est, cum juvat, ipse deus.
Post ubi curato, poscit sua præmia, morbo,
Horridus apparet, terribilisque Sathan."

("Three faces wears the doctor : when first sought,
An angel's—and a God's, the cure half wrought ;
But, when that cure complete, he seeks his fee,
The devil then looks less terrible than he.")

Pope sang in the same strain, although he was not one of the brotherhood :

"God and the doctor we alike adore,
But only when in danger, not before ;
The danger o'er, both are alike requited,
God is forgotten, and the doctor slighted."

Garth's cutting epigram may be hurled at our heads and hearts after we have saved from misery some shrivelled soul (giving the atrophied object the benefit of a doubt), and restored his carcass to health and strength, against the well-being of society :—

“ Like a port skuller, one physician plies,
And all his art and all his skill he tries :
But two physicians, like a pair of oars,
Conduct you faster to the Stygian shores.”

At the same time it is well to be so painstaking, diligent, and cheerful in the practice of our profession, as to show that we love it for its own sake, in spite of all obloquy and undeserving reproach. An elongated vision—a profusion of tears and groans—an ominous shake of the head—a significant shrug of the shoulder—a recital of the signs and symptoms of others—“ just like you, my dear sir, and they died ”—are not assuring tokens to the nervous, nor fortifying to critical cases. Cheerfulness is a diffusible stimulant that will traverse nooks and crannies of soul, spirit and body, where remedial substance never reached, and a radiant countenance is a tonic to the weak, despondent, and helpless. In this conservative age of medicine, when sanitary regulations, dietetics, and expectancy so largely prevail in the practice of medicine and surgery ; when the test-tube, the microscope, thermometer, and the sphygmograph, are so indispensable to diagnosis, doubtless soon to be followed by the wonders of the searching spectroscope, we often lose sight of the personal influence of the cheerful practitioner for weal ; and the despondent, timid, vacillating, lugubrious attendant for woe. Faith in a doctor, no larger than a grain of mustard seed, will often, through psychological influence, work marvels in bracing up the system, through unbounded confidence and inspiring potent hope. The “ blues ” in physicians do seriously, in the aggregate, affect the statistics of mortality, but a glad countenance is a rich venison to the downcast and afflicted. I know physicians whose jolly, smiling, gladsome faces would do me more good than all the boluses of others, even if

“ For physic and farces, their equal there scarce is :
Their farces are physic, their physic a farce is.”

Finally, let us be kind to each other. If we cannot agree, let us maintain a strict neutrality, and may “ our bugles sing truce.”

We have too many enemies to wage war against in self-defence, "without the camp," instead of being like the historic Kilkenny cats found devouring one another. It is not an indispensable condition of our noble profession to indulge in heart-burnings, bickerings, envies, and jealousies; for, in the arena of conflict with disease and death, we have room enough in this great battle-field of life to test all our powers in honorable sympathetic rivalry "without fear and without reproach." These are my feeble sentiments, convictions and utterances, I hope sincerely given, for "I am in a place and position where I am demanded of conscience to speak the truth: the truth, therefore, speak, I; impugn it whoso listeth."

THE ADMINISTRATION OF CHLOROFORM.

BY W. S. COLEMAN, M.D., (ASSISTANT SURGEON, TORONTO EYE AND EAR INFIRMARY.)

In a paper entitled "Resuscitation in Apparent Death from Chloroform," (contained in the June No. of the *Lancet*) it is remarked, "very many of the cases of accident from chloroform arise from the hap-hazard manner in which the anæsthetic is administered." During the past year, I have administered chloroform at least to fifty patients according to a method originated by Dr. A. M. Rosebrugh, sen. surgeon Toronto Eye Infirmary, and believing it to possess many advantages over and to be more safe than the usual methods, I propose to consider the effects of chloroform, and subjects connected with its administration, in order to estimate the affirmed advantages claimed for Dr. Rosebrugh's method. Chloroform gradually administered, at first like alcohol and most narcotics, stimulates; the pulse is quickened and more forcible; then the functions of the nervous centres are suspended, the brain loses the power of receiving sensations and exciting voluntary motion; and there is loss of perception, thought and consciousness. Soon the functions of the cerebro-spinal axis are abolished, the voluntary muscles are relaxed, and not capable of reflex action.

The Royal Med. and Chirurg. Society, by experiments upon animals, determined that "dilute chloroform vapour (5 per cent. or less) blown upon the fauces produced very little inconvenience, and

the animal continued to breathe in a natural manner, but if concentrated vapour be suddenly administered, a spasm of the fauces is induced : afterwards when the animal has inspired, the phenomena of asphyxia are for a time associated with those of chloroform poisoning.

It is believed that anæsthetics, as carbonic acid, ether and chloroform, act by suspending the due oxygenation of the blood.

In a case of fracture of the skull when chloroform produced its full effect of narcotism, the brain was seen to be remarkably pale, and whenever the anæsthetic influence began to subside, the surface of the brain became florid.

The pulse in complete anæsthesia is reduced to its normal frequency.

MODES OF DEATH.—According to Dr. Richardson, there are four modes of death. The first he calls *Syncopal apnœa* in which death is very rapid, commencing within the minute after the commencement of inhalation. Respiration is suspended, there is an accumulation of carbonic acid in the blood, irritation of the vagus and arrest (from the irritation) of the action of the heart.

2nd. Death from epileptiform syncope, or muscular excitability. It occurs during the rigid stage. All through the body there is evidence afforded, on the arterial side of the circulation, of intense arterial contraction.

3rd. Paralysis of the heart and muscular system, from the slow and continued action of the narcotic. Death is preceded by an intermittent pulse.

4th. Depression from chloroform and surgical shock, paralysing both the pneumogastric and sympathetic.

CAUSE OF DEATH.—Dr. Richardson says, "I infer that in every case of death from chloroform, the cause of death is excitation, either of the motor or of the controlling nervous mechanism of the heart." Dr. Sansom remarks, "the danger of chloroform resides in the fact that in strong doses it is a direct cardiac depressant, and paralysis of the heart is the usual form of death from chloroform in man." Lister maintains "that chloroform kills only in one way, viz. by paralysing the muscles of respiration."

PER CENT OF FATAL CASES.—Mrs. Syme gave chloroform in 5000 cases without a death resulting, and Sir J. Simpson quite as frequently, with a like fortunate result. Dr. Snow used his inhaler

in 4000 cases, of which only one was fatal, and that seemed to be independent of the chloroform. Up to 1871 no case of death from chloroform had occurred during nine years, either in the Edinburgh or Glasgow Infirmary, two of the largest surgical Hospitals in Great Britain, and it is very interesting to note the conditions of the so successful practice related by Prof. Lister. In both these institutions a folded towel on which the anæsthetic liquid is poured, unmeasured and unstinted, is still the only apparatus employed in the administration: preliminary examination of the heart is never thought of, and during the inhalation the pulse is entirely disregarded; but vigilant attention is kept upon the respiration, and in case of its obstruction, firm traction upon the tongue is promptly resorted to. In 17,000 administrations in the English hospitals there was only one death. As an unfortunate contrast with the above, I saw during the winter of 1871, three deaths during the administration of chloroform in "the London Hospital."

No death has occurred in a patient under 5 years of age, but the number of administrations under that age has undoubtedly been much less than above it.

DANGER OF CHLOROFORM.—In 109 cases of death, the committee of Med. and Chirurg. Society report on the stage of anæsthesia at which death occurred. Commencing to inhale, 10. Before full effect of chloroform, 50. During full effect, 52.

Figures go to show that the fatality in females and the debilitated, is less than in males, and the strong.

The average amount of chloroform used in 37 fatal cases was seventeen drachms. In five cases the amount was half a drachm.

Dr. Snow from experiments upon animals, considered it dangerous for the human subject to breathe more than 5 per cent. of the vapour, of chloroform. Messrs. Lallemand Perrin and Duroy, find that though mawmifers can remain in an atmosphere of 4 per cent. for a considerable time, they die rapidly in an atmosphere of 8 per cent. It has been ascertained that from a handkerchief, one may breathe an atmosphere containing 12 per cent., which according to the above, would be very dangerous.

Dr. Anstie gives an account of 21 cases, in which he saw dangerous symptoms in the course of chloroform administration. In 858 it was given on lint. In 2200 an inhaler was employed. In

the former, one in 53 evinced signs of danger. In the latter where due dilution was provided for the proportion was only one to 440.

The chloroform Committee report:—"Experiments upon the lower animals equally with observations on man, prove that there is but a narrow limit between that strength in which the vapour may be safely inhaled, and that which is likely to produce alarming symptoms if not death,"—and that it is as desirable to measure the strength of the vapour, as to weigh the dose of a medicine administered by the mouth. "In animals the symptoms have been induced safely, with a fully diluted vapour." A proportion of 5 per cent. of vapour is fatal to animal life. Dr. Sansom, Dr. Anstie and the chloroform committee gave $3\frac{1}{2}$ per cent. as the proportion, and $4\frac{1}{2}$ as the maximum which can safely be respired.

That the system will bear a larger dose of chloroform if it be gradually given, seems evident from an experiment of M. Claude Bernard, since the effects of carbonic acid and chloroform are similar. A sparrow left in a bell glass, to breathe the same air over and over, will live for three hours, but, if at the close of the second hour, a fresh sparrow be introduced, it will expire immediately.

CONDITION OF PATIENT.—By some it is thought chloroform by promoting shock during operations is a source of safety in heart disease. In case of apparently well marked signs of fatty heart, perhaps it would be better not to administer chloroform except for the major operations in which case the freedom from shock might more than counterbalance the depressing effects of the narcotic. Dr. Squarey cites the case of a woman between 60 and 70, to whom chloroform was administered, her foot was removed, she died a few days after from the effects of the operation, the heart was found very fatty, the walls thinned, left pleura half full of pus, yet she took the chloroform well for half an hour.

Dr. Richardson says he knows "of only one condition of the body especially dangerous for chloroform, this is a weakened and dilated right side of the heart." Many deaths have occurred in hard drinkers which may be due to the fatty heart of the intemperate. "In uræmia and pyæmia, and in severe shock to the nervous system, it should be withheld" "and in hysteria more than usual care should be used."

Sansom considers acute hyperæmia of the lung,—the only diseased condition of the lung in which chloroform should not be given.

SIGNS OF DANGER.—Sansom divides them into four classes :

I. Signs of sudden cessation of the heart's action. These are most frequent. The pulse suddenly stops, or it first flickers and then stops, or a sudden pallor of the face and lips is first observed. In these cases there is seen to be no embarrassment of respiration. It often continues after the pulse has ceased.

II. Signs of muscular excitement. Early in the inhalation, the patient has struggled and risen up, and has fallen back dead, or the muscular contortions occurred when there was complete insensibility. Lividity of the face is caused by the suspension of the action of the respiratory muscles.

III. Signs of embarrassed respiration. The respiration may be laborious, irregular or stertorous.

IV. Signs of simultaneous arrest of respiration and heart's action. An inspiration of a highly charged atmosphere has been taken and hence the sudden arrest of pulse and breathing. In the experience of Dr. Squarey the pulse does not give much sign of danger till after those given by the respiratory system ; yet, he remarks, chloroform certainly does kill by paralysing the heart, and the pulse should be watched.

Dilatation of the pupil which is said to be a sign of danger, is also the first sign of the patient's recovery from the influence of chloroform. Prof. Lister divides stertorous breathing into two kinds, palatine and laryngeal. Although the snoring produced by vibrations of the velum, frequently takes place without indicating danger, whenever there is any stertor, other signs of danger should be looked for.

METHODS OF ADMINISTERING.—Many of the inhalers used are faulty, in furnishing the same per centage of vapour at the commencement of, as during the subsequent administration. Clover's inhaler is free from the above objection, yielding any per cent of vapour required, but the size and expense of inhalers, and the generally considered safety of the ready method, of giving chloroform make it unlikely that inhalers will be used by any number of general practitioners. Dr. Snow assumed when chloroform is given from a folded cloth it is apt to be given in too concentrated a form to which

he attributed most of the deaths, whereas Prof. Lister thinks the argument a fallacy, and shows by his own experiments if ʒiss. of chloroform by measure is poured on a cloth similar to that used in practice, at a temperature of 70° twenty-four grains are evaporated during the first half minute, giving 4.5 per cent, as the proportion of vapour to the inspired air. Now, supposing in practice, ʒiss. is used during the early part of the half minute, more than 4.5 per cent. is evaporated, and if the quantity be soon repeated, it is possible that death may occur before the end of the half minute, since out of 109 deaths the chloroform committee report ten deaths at the commencement of inhalation. Yet in practice, Prof. Lister says: "the precise quantity used is a matter of no consequence whatever. in which case the per cent of vapor must be above that considered safe." We have seen that Drs. Snow and Sansom, the chloroform committee, &c., hold quite a different opinion. I have never seen chloroform given by drop in hospital practice, except in New York, and then the quantity was not measured by counting the drops per minute. In 1847 Sir J. Y. Simpson writes: "The simple handkerchief is infinitely preferable to any instrument. I have lately seldom measured the quantity. We must judge of its effects more than its quantity." In 1860, he writes, "For some time past I have administered chloroform by a new method. One single layer of towel is laid over the patient's nose and mouth, and the chloroform is poured drop by drop. By the new method the patient is more rapidly anæsthetised, whilst a great saving is effected in the amount of drug employed. There is little or none of the drug lost, and it is inhaled mixed with a sufficient quantity of air, which is easily inspired through a single layer of ordinary napkin." It is noticeable that in 1860, Prof. Simpson thinks there should be a "sufficient quantity of air," and how can that be possibly secured without measuring the chloroform. Dr. Sansom lays down two principles in administration for securing the greatest safety:

I. The continuous inhalation of an atmosphere of known strength (of about $3\frac{1}{2}$ per cent). This is the principle of definite dilution.

II. The administration of an extremely dilute atmosphere at first, and the progressive increase in its strength, never overpassing five per cent.

I believe Dr. Rosebrugh has secured by his new method of

administering chloroform, the maximum of safety, in accordance with the principles laid down by Dr. Sansom, by such a ready method, and possessing so many advantages that it seems to me to require only a trial, and I predict there would be a rare exception to its adoption even by the most conservative. Dr. Rosebrugh writes : " My method of administering chloroform is as follows :—The patient is placed on his back ; and one thickness of a linen napkin is placed over the face. A 3ii. vial is filled with chloroform : an assistant observes the pulse, and holds the watch in such a position that the administrator may see the second hand. The napkin is raised about $1\frac{1}{2}$ inches from the mouth, so that it does not touch the nose. The chloroform is now dropped upon the napkin over the mouth. One-third the maximum dose is given during the first minute ; two-thirds the second, and the maximum quantity the third. The maximum dose should be continued from two to six minutes, till full narcotism is produced. The maximum quantity may be given occasionally, or one-half the quantity continuously. To adults I have found 30 drops per minute, in most cases, sufficient. For children 12 years of age 18 drops ; 7 to 9 years 15 drops ; 5 years 8 to 10 drops. To adults never more than 35 drops per minute. Dr. Rosebrugh estimates if a patient inspires the whole of the vapor of 33 drops of chloroform per minute, he will be inspiring $4\frac{1}{2}$ per cent. If 20 per cent be wasted, the per cent inhaled would be reduced to $3\frac{1}{2}$, the safe proportion. The advantages of the method, judging from the number of cases I have seen, are, the small quantity of chloroform used, 3i. to 3ij. Even children seldom object to it when given as directed. Adults seldom cough or spit. There is rarely any violent muscular movement or struggling, and the weight of authority seems to show that it is more safe to measure the dose than to give it hap-hazard.

RULES FOR ADMINISTRATION.—If the patient has fatty heart, dilated right ventricle, hyperæmia of the lungs, or is intemperate, chloroform should be given perhaps for major operations only, and then with great care.

A glass of milk four hours before the administration would perhaps be the most suitable food. Half an ounce to an ounce of brandy or whiskey to a full adult, and a teaspoonful to a child should be given twenty minutes before the administration of chloroform. The patient should lie down, as the heart is depressed. If

the administrator has not an assistant to take the wrist pulse, he may keep a finger on the temporal artery. The respiration should be closely watched, and the face occasionally. When there is no reflex muscular action, which is best tested by the patient not winking, when the eyeball is touched, the patient is prepared for the operation. Squarey says, "the insensibility of the pupil to light is a more reliable test. If there be signs of danger draw the tongue out forcibly with the artery forceps." Hoping the putting of the above facts and theories together may somewhat help to render the administration of chloroform more safe, this too lengthy article is brought to a close.

RETENTION OF URINE PRODUCING CLOSURE OF THE ORIFICES OF THE URETERS, TERMINATING FATALLY.

BY ALEX. BETHUNE, M.D., GLANFORD, MEM. MED. COUNCIL
OF ONTARIO.

On the 24th of April last, I was called to see M. P., a female child three weeks old. I found her suffering from general erythema, which in many parts of the body almost amounted to erysipelas. As the mother was subject to erysipelas, and as she had lost one child at the age of two weeks with that disease, I was afraid that this one would share the same fate. On enquiring into the history of the case, the mother informed me that the infant had the "red gum" at first, such as all her children had, and therefore she did not feel alarmed, until, instead of disappearing, as she expected it would, the eruption became rapidly worse, and retention of urine ensued. When I first saw the child there was slight fever, with occasional attacks of vomiting; but it nursed well, and did not seem in much pain.

I prescribed a weak solution of soda bicarb., to be given every three or four hours; and ordered it to be placed in a warm bath, at the same time showering it over the abdomen and private parts. This treatment had the desired effect, and I did not see the child again until the 28th, when I was called, and found it much in the same state as before. As there was still considerable erythema, which seemed worst about the private parts, the vulva and meatus urinarius being greatly swollen and inflamed, I repeated the soda

mixture, anointed the parts with unguent. oxid., zinc. alb., and ordered a repetition of the bath, &c.

On the 30th I saw the child again, and found it much in the same state, with the exception of the erythema and swelling, which were much better. As the bladder had not been evacuated in six days, I introduced a small silver catheter, but as no urine came away, I withdrew it and found, much to my astonishment, that it was perfectly dry, not even tinged with moisture. There was no swelling over the region of the bladder, such as would have been expected in retention of urine, but a slight ridge was visible along the course of the ureters, and also a fullness over the kidneys. My diagnosis, from these symptoms, was that the orifices of the ureters, where they enter the bladder, were obstructed, most likely by agglutination of the muscular coats of the bladder, caused by pressure of the urine when it was so long retained, before my first visit.

I continued to attend the child, visiting it every second day, and introducing the catheter, with the same result, until its death, which occurred, with all the symptoms of uræmia, on the 22nd of May. At every visit the course of the ureters became more distinct, so that, at last, they seemed dilated to the size of a man's thumb, for nearly their whole length, until they merged in the pelves of the kidneys, which seemed swelled almost to bursting.

Circumstances prevented me from holding a *post mortem*, which would, no doubt, have been very interesting.

In reviewing the case it will be seen that there was first, the erythema which caused the swelling of the vulva and meatus urinarius, thereby producing retention of urine, which in its turn caused the closure of the uretral valves, if I may so style them, thereby causing dilatation of the ureters and kidneys, which terminated fatally.

In confirmation of my diagnosis, I refer to an article by Sir Henry Thompson, which appeared in the *British Medical Journal*, March 8th, 1873, and was re-published in the May No. of the CANADA LANCET. The extract reads thus:—"Owing, then, to the pressure of some obstruction to the escape of urine from the bladder, that organ becomes dilated, the secreting substance itself is compressed against the capsule, and finally the whole organ may be distended into a sort of cyst. I have seen the ureters as large as the small intestine, and contain, with the pelves of the kidneys, thirty fluid ounces of urine."

As such cases are of rare occurrence, I am therefore induced to send you a report of this one, with the hope that it may be of interest to the readers of your journal.

Correspondence.

(To the Editor of the LANCET.)

SIR,—Among the subjects which engaged the attention of the Brant Medical Association, at its last meeting,—of which a brief report appears in this month's LANCET,—there is one at least which deserves to be brought more particularly under the notice of your readers. I refer to a certain combination of medicinal plants, spoken of by Dr. Kerr, of Galt, and others, as having been used in the treatment of dysentery and some other diseases.

A considerable number of practitioners in this part of the country, and some in other lands, have used this medicine, and have expressed their very high appreciation of it. Several physicians, within the circle of my own acquaintance, have been using it for some years past, with remarkably favourable results. I am confident those gentlemen will concur with me in the very high opinion I have been led to form of its value, in the treatment of some forms of disease, involving especially the mucous membranes, and ranking among the most important and frequently-occurring to be met with in this country. I conceive that Dr. Kerr, to whose patient investigation and painstaking course of therapeutic inquiry we are indebted for this valuable means of combating disease, has laid the Profession under no small or inconsiderable obligation. I have used this combination, in its several modifications, for about nine years, with every reasonable satisfaction. In dysentery especially, and in diarrhoea, it has proved itself invaluable; and in croup, in scarlatina, and even in variola, unmistakable benefit has been derived from its use. Such is its efficacy in dysentery, as ordinarily occurring in this neighbourhood, that our usual experience is, to order six or eight powders for the patient, and to hear no more of the case, until one chances to meet the *quondam* patient or some of his family afterwards, and then learns the favorable result, oftentimes so prompt as to render it unnecessary to use the whole number of doses sent. And we constantly find persons coming to us and asking for the

“green powders,” so obvious is the efficient action of the medicine to those who have seen it employed, especially in severe cases, which have previously baffled other and more familiar means of treatment.

I am permitted to state that Doctors Lawrence and Dickson, of this town, have both used Dr. Kerr's digitalis and squill combinations for several years past, and are thoroughly satisfied of its results. Dr. Lawrence was for a time inclined to be sceptical,—attributing the results obtained entirely to the opium, usually combined with the medicine, in the treatment of dysentery and diarrhœa. But I am aware that, as he stated before the Association, his original distrust gradually gave way, as he continued to use the medicine. Cases have occurred to him, as to many of us, in which we failed to subdue the dysenteric symptoms, while giving the medicine combined with opium, as usual, but soon succeeded when the opium was left out. Indeed it is highly probable that the principal effect of the opium in this combination, is simply to lessen the frequency of the dejections.

Having learned that Dr. Kerr has consented to send some of his published papers for insertion in your next issue, I have not thought it necessary to refer at all to the several articles included in the combination, or to any details in regard to their administration. Nor shall I ask space in your excellent journal for reports of particular cases,—but simply offer my humble testimony, as one of a number of practitioners, who has used the medicine for a considerable length of time, and who has felt an ever-increasing confidence in its efficacy in appropriate cases.

Yours, &c.,

WM. CLARKE.

Paris, Ont., July 10th, 1873.

To the Editor of the LANCET.

SIR,—The following unique case is worthy of record :—A few years ago a young man in this vicinity went out to hunt deer. He came to a chopping, and was mounting some tree tops to get a clearer view of the place. He was carelessly dragging his rifle after him, when it exploded. The ball passed through the limb of a tree about three inches thick, tore a portion of the integument off the inner side of the right thigh, passed through his trousers in three

places, and imbedded itself in the *glans penis*. I extracted the ball and patch covering it, and in a few weeks his recovery was complete. He is now married and the father of several children. I am not aware of cases having been recorded where the ball from any fire-arm lodged in this portion of the body, although the eccentric and remarkable course taken by these missiles when striking an animal body is well known to surgeons. Animal bodies seem to resist or deaden the force of bullets by simply yielding to a certain extent at the moment of contact.

JOHN H. GARNER, M.D.

Lucknow, July 5th, 1863.

To the Editor of the LANCET.

SIR,—I have this day been called upon to attend a surgical case of peculiar difficulty, and beg to report its nature.

Mr. B., a farmer, living four miles from my office, attempted to lower himself from a mow *or loft*, in which he had assisted to store his hay. In doing so, he swung his body off the mow, and to break the fall held on to the edge (which was composed of upright boards with rough sawn ends, nailed to a cross-beam) by his right hand. A splinter on the edge of a board caught the whole weight of the body and impinged on the flexed hand, just over the carpo-radial articulation. The splinter was forced through the skin and the patient fell from the mow, and felt that a serious injury had been done. His co-labourer attempted to remove the splinter, and broke it off; and after a few more efforts at extraction, the patient came hurriedly into town to seek surgical assistance. About an hour after, he presented himself at my office. He was cold and partially collapsed, showing some serious form of injury. All he had to show was a small wound, about a quarter of an inch in length, in front of the carpo-radial articulation. He complained of excruciating pain and partial numbness of the two middle fingers.

I probed the wound and could find no foreign substance. I must say, I avoided the joint of the wrist in my deep and serious explorations as much as possible. I enlarged the opening through the dangerous area as carefully as possible, and still could find only tendons, &c. I was about giving up further explorations, but the "confidence of the patient that the *sliver was there*" induced me to

more earnest endeavours. I sent for my confrere, Dr. Battersby, to assist, and to administer chloroform, as the patient was becoming exhausted and exceedingly nervous. Dr. Battersby promptly came to my assistance,—it was now in the “dusk of evening.” He quite agreed with me that further explorations should be made. After chloroform was administered, I enlarged the opening still farther, and explored the whole of the carpus and palm as far as careful dissection would permit. No foreign substance could be found. I was about to abandon further attempts, when (as the patient was in a state of complete anæsthesia) I introduced my finger, and explored all parts of the posterior carpus; but on flexing the hand on the forearm, and exploring above, I detected a moveable body under the anterior ligament of the joint; by my nail it was moved to the original aperture, and by means of forceps I was enabled to extract, from the carpo-radial articulation, a mass of wood $\frac{5}{8}$ of an inch long and $\frac{1}{12}$ of an inch in diameter.

After rallying from the chloroform, I applied water dressings, and gave directions to keep them perseveringly applied with anodynes until I saw the patient on the morrow. I need not mention my apprehensions; every professional man will recognize them. The progress of the case will be mentioned in some future issue.

Yours, truly,

N. O. WALKER, M.D., M.R.C.S., Eng.

Port Dover, July 16th, 1873.

QUACKERY.

(To the Editor of the LANCET.)

DEAR SIR,—I send you an extract from a local paper of the 16th inst., as a sample of how they do it in this locality:

IMPORTANT SURGICAL OPERATIONS BY DR. DOW.

A few days since Dr. Dow removed a large Tumor from the arm of Mrs. Moses Haris, of Blackville, Miramichi. The swelling extended from the elbow to the shoulder, and had been enlarging for some years past. Mrs. Harris said that it was too heavy for her to carry any longer. She is rapidly recovering.

HARE-LIP.—A child of Mr. Pearsons, living near Florenceville, Carleton County, was operated on for a deformity a few days ago. It was not considered a bad case. The little patient is nearly well.

Dr. Dow informs us that this was the one hundred and sixteenth time ! that he has operated for said deformity.

ACCIDENTS.—John Flanigan, who had his leg so badly fractured, and knee dislocated, is doing very well. His health has not been good for some time past, his lungs being seriously affected. Dr. Dow thinks that there is still a chance of saving his leg.

A daughter of Mr. Egan, school teacher at Hamtown, had her arm badly broken last Saturday, by a fence falling while she was getting over it. The bones of the elbow were completely crushed, and she will probably have a stiff arm for life. Dr. Dow has the patient in charge.

The author of the above has flourished by this and similar means for the last twenty years in Fredericton.

Yours, &c.,

MEDICUS.

Fredericton, N. B., July 19th, 1873.

MINUTES AND PROCEEDINGS OF THE MEDICAL COUNCIL OF ONTARIO.

FIRST DAY'S PROCEEDINGS.

The Council met in the Court House, Toronto, on the 25th of June. Dr. Dewar in the chair. All the members were present except Dr. Morrison.

On motion, Dr. Wm. Chark was appointed President, and Dr. Muir (Eclectic) Vice-President.

Dr. Forrest Dewar, in leaving the chair, said that in retiring from the position as President of the College of Physicians and Surgeons there was one circumstance which he was sure each and every one of them would regret—the absence from their Board of an old and most esteemed member through death. He had no doubt that some testimonial would be drawn out by the Council expressing sympathy with the deceased's bereaved family. He regretted himself, owing to circumstances over which he had no control, that he could not pay that attention to the business of the Council that he should have done. He begged to thank the Vice-President of the Council for the active, hearty, and steady hard-working manner in which he assisted him when he was unable to carry out his work. He really believed the conferring of the Presidency of that Council upon him was an honor to which he was not entitled, and he could only say that he thought he would be better as a gladiator in the arena than as a judge in the circus.

Dr. Clarke, on taking the chair, referred to the importance of

this Council, which represented 1,600 medical men of the Province, and to his diffidence in accepting the position. He thanked them for electing him, and he would endeavour to do all in his power to draw them together and keep them so, for the benefit of the public as well as the profession.

Dr. Brouse moved that Drs. W. T. Aikins and Thos. Pyne, respectively Treasurer and Registrar, should be re-elected for the ensuing year.

Dr. Campbell moved in amendment that the Treasurer be instructed to hand over to the Registrar, when appointed, the monies, papers, and other documents connected with the Council. He contended that they could not comply strictly with the existing Act without uniting the offices of the Treasurer and Registrar. It was not competent for them to have two persons performing those offices.

After some discussion Dr. Campbell put in the following charges condemnatory of Dr. Aikins' conduct, as treasurer of the Council.

"That inasmuch as Dr. Aikins, Treasurer of the College of Physicians and Surgeons of Ontario, in reporting as to the financial condition of the Council before a special committee of the Legislature of Ontario on the 26th of February last, asserted that he had, within a period of ten days, paid a claim of Messrs. Hunter, Rose & Co. for printing papers at the last election, and inasmuch as that firm declared that no payment of any kind had been made by Dr. Aikins, and threatened to institute proceedings for the recovery of the said amount alleged to have been paid by him, and that Dr. Aikins by such statement wilfully and fraudulently misled the Parliamentary Committee of the House of Assembly, and materially led to the defeat of the bill before the aforesaid committee of the Legislature, by which defeat, it is confidently believed, that a loss of six thousand dollars has been sustained by the Council, therefore be it *resolved* that the said Dr. Aikins has forfeited the confidence of the Council and is not a fit and proper person to hold so responsible a position as that of treasurer to the College, and that he be called upon to resign such office, and deliver up to the registrar without delay all moneys, receipts, papers, &c., pertaining to the affairs of the Council which he may have received in his capacity as treasurer."

Moved by Dr. Brouse, seconded by Dr. Grant,—“That the charges of Dr. Campbell be referred to a committee of five members of the Council, who shall investigate and report as speedily as possible, and that the said Committee be composed of Drs. Hyde, Hodder, Muir, Bethune, and Berryman.”—*Carried*.

Dr. Dewar moved, seconded by Dr. Berryman, “That this Council, at this early period of its session, would beg to tender to the widow and family of the late Dr. Agnew its sincere and heartfelt

sympathy at his untimely death. The Council regrets the loss of one of such genial disposition, and energetic and zealous action in all matters connected with the working of this Council, and deem it their duty thus to record by this testimonial their sense of his worth and that the said resolution be forwarded in proper form to Mrs. Agnew."—*Carried.*

Dr. Campbell explained the action of the Legislature during the past session with regard to the Ontario Medical Act, and moved that the proposed Act to amend the Ontario Medical Act be taken as a report of the Committee appointed for the purpose of considering the subject by the Executive Committee and be referred to a Committee of the Whole on the following day.—*Carried.*

A full text of the Bill, as amended by the Council, will appear in our next issue.

On the motion of Dr. Berryman the following gentlemen were appointed a Committee for the appointment of the Standing Committees : Drs. Dewar, Brouse, Adams, Bogart, Edwards, and Daniel Clarke.

The following are the names of the gentleman on the standing committees :—Printing Committee—Drs. Campbell, Eastwood, Springer, Cornell. Finance Committee—Drs. Hyde, Vernon, Fields, Hillary, Coburn and McDonald. Rules and Regulations, Committee—Drs. Adam, Cornell and Berryman. Education Committee—Drs. Brouse, Grant, Aikins, Hodder, Berryman, Dewar, D. Clarke, Bogart, Edwards and Lavell. Registration Committee—Drs. Lawrence, Bethune, Hodder, Campbell, Bogart and Dewar.

On motion of Dr. Berryman, seconded by Dr. Aikins, two reports on the recent examinations were referred to the Committee on Education.

Dr. Campbell moved that the motion passed at the late annual meeting of the Council, with reference to Dr. Carson, disqualifying him from sitting on any committee, be expunged from the minutes.

After some discussion, it was moved by Dr. Brouse, as an amendment, that the Council proceed to the regular business.—*Carried.*

SECOND DAY'S PROCEEDINGS.

Dr. Brouse presented the report of the Committee of Education. The following is the report of the Committee as amended and adopted :—"Your committee had under consideration the two communications from the Board of Examiners, and they arrived at the following conclusion :—That at present it is not advisable to institute an extended competitive system of examination ; that the examinations should be partly oral and partly written ; that, if possible, the examining body should be reduced, in order to lessen the expenses

of the Council ; but that under all circumstances a certain standard must be exacted. As far as possible the marks made over and above the required number should be recorded, in order to the forming to some extent of a comparative estimate of the excellence and proficiency attained under the prevailing system of medical education. In all cases, too, where more than ordinary ability is evinced, the examiners should have the power to accept the written answers of the candidates as being sufficient without subjecting them in addition to the usual oral examination. Sixty marks out of a probable hundred to be considered evidence of such proficiency.

"The following are the names of the examiners appointed for April, 1874 :—Dr. Aikins, Surgery and Surgical Pathology ; Dr. Hodder, Anatomy, Descriptive and Surgical ; Dr. Lavell, Midwifery and Diseases of Women and Children ; Dr. Berryman, Materia Medica ; Dr. Wm. Clarke, Medical Diagnosis ; Dr. Daniel Clarke, Chemistry ; Dr. Dewar, Medicine and Medical Pathology ; Dr. Edwards, Physiology ; Dr. Macdonald, Medical Jurisprudence and Toxicology ; Dr. Vernon, Sanitary Science ; Dr. Bogart, Botany.

"Homœopathic Examiners—Drs. Vernon and Field. Eclectic Examiners—Drs. Cornell and Bogart.

"In the event of any of the examiners failing to attend, the President shall appoint one in his place ; and shall also arrange the programme of examinations. Your committee further recommend, that in the event of any candidate signifying his intention to the Registrar to be examined and registered as a homœopathic or eclectic practitioner, due notice of such must be submitted to the registrar, so that the examination may be conducted by the respective parties appointed for that purpose ; but prior to the acceptance of such notice from the candidate, the usual fees must be paid. In the event of any candidates presenting themselves for such examination, due notice to be given by the Registrar to the special examiner. All regulations of the Council, inconsistent with the above, to be repealed. Your committee further recommend that no change be made in the curriculum for '72-'73."

The committee appointed to investigate the charges made by Dr. Campbell, against Dr. Aikins, reported the following resolution as the result of their deliberations :—

Resolved, That the gross charges that were made by Dr. Campbell as against Dr. Aikins, accusing him of having wilfully and fraudulently misled the Parliamentary Committee of the House of Local Legislation, and thereby having defrauded this Council of \$6,000, find that after proper and careful examination of the charges made by Dr. Campbell, they are proved to be entirely without foundation ; and the Committee appointed to carry out the investigation are of opinion that such rash and reckless charges without mature evidence deserve the censure of this Council.

The report was adopted by a vote of 15 to 5.

The following is the report of the Committee on Finance as amended and adopted :

1. That they have examined the books of the Treasurer, together with the vouchers and cheques attached, and found them to correspond, leaving a balance in the hands of the Treasurer to the credit of the College of \$1,196 46.

2. We have pleasure in finding everything so thoroughly correct and satisfactory, and we feel it our duty to record the indebtedness of this Council to him for his many disinterested and unrequited services.

3. Your Committee have also examined the books of the Registrar, and found them correct, the books showing the amount received by the Registrar to be \$653 75, and the amount paid out \$633 80, leaving a balance in hand of \$19 95.

4. We find that Dr. Wood, the Matriculation Examiner at Kingston, is indebted to the College on account of matriculation fees the sum of \$108 00, which sum your Committee recommend the collection of.

5. Your Committee would recommend the payment of the accounts presented for printing, advertising, &c.

6. The account of Mr. Rolph, Engraver, amounting to \$74, as by agreement with Mr. Rolph, is recommended to be paid, as moneys accrue from the sale of diplomas.

7. The Committee are of the opinion that in the present state of the finances of the College the matriculation examiners fees should be reduced to \$2 per student.

8. Your Committee recommend that the examiners employed at the last examination be paid as follows :—The resident examiners, \$15 each, and the following named : Drs. Sullivan, Morrison, Muir and Field, \$20 each, travelling expenses exclusive.

9. Your Committee find that there will be a balance left to the credit of the College of about \$550, out of which they recommend payment to the members attending the present session of \$6. per day each, together with travelling expenses.

10. "Your Committee, in conclusion, would recommend that no accounts be paid on account of the College in future without the direct orders and sanction of the President, and that the Registrar hand over all moneys immediately on coming into his possession to the Treasurer."

Dr. D. Clarke moved, seconded by Dr. Hyde, that if sufficient funds come into the hands of the registrar, within one month of this date, \$20 shall be paid to the resident examiners, and \$30 to those from a distance, exclusive of mileage.—*Carried.*

THIRD DAY'S PROCEEDINGS.

Dr. Aikins moved that Mr. Archibald McMurchy, M.A., Rector of Toronto High School, be appointed Matriculation Examiner in place of Dr. Wickson, resigned.—*Carried.*

The Amendments to the Ontario Medical Act were again brought up for consideration.

Dr. Lawrence moved, seconded by Dr. Hyde, that the report of the whole on the amendments to the Medical Bill be adopted, and that it be left to the Executive Committee to carry it out as a consolidated Medical Act, or otherwise as they may see best.—*Carried.*

Moved by Dr. Aikins, seconded by Dr. Lawrence,—That Drs. Berryman and McDonald be appointed to audit and investigate the books of the late Registrar, and report to the President.

Moved by Dr. Dewar and seconded by Dr. Lavell, that the following gentlemen be the Executive Committee for the present year—The President, Vice-President, Drs. Berryman, McDonald, D. Clark, Dewar, Coburn, Aikins, Adams, Hodder and Lavell, five members to form a quorum.

Dr. Campbell presented the following Report of the Committee on Registration :—

Your Committee beg leave to present the following report :—The Registrar submitted a statement showing that 89 students had been entered on the Register. The number of matriculants on the student's register is now 406. 57 names have been added to the number of registrations since last report. The names of 32 members have been removed by death since the period when the registration of medical practitioners commenced in this Province. Also 39 persons have availed themselves of the opportunity of obtaining the diplomas of membership recommended by the Registration Committee last year.

Dr. Dewar moved, and Dr. Hyde seconded, the following resolution :—"That this Council beg to insist on the absolute necessity of economy with reference to the carrying on of the examinations." *Carried.*

Dr. Berryman moved, seconded by Dr. Dewar, the following resolution :—"That during the past year much labour has been entailed on the shoulders of the late Vice-President, Dr. Campbell, in organizing many details of the proposed amendment to our Medical Act; that the non-passage of such amendment was due to certain circumstances over which the Committee, along with Dr. Campbell, had no control ; but still the thanks of this Council are due to Dr. Campbell for his many and assiduous labours."

Dr. Campbell wished to return his thanks for this unexpected kindness. He said he had endeavoured to work harmoniously with

every gentleman of the Council. He was foremost in trying to put down any feeling of an evil spirit, but the action he had taken had not the effect on his friends he expected. But he was about to sever every connection with the Council. This was the last time that any Homœopathists would ever sit within these walls, for it was intended to send in the resignation of all the Homœopathists in this Council to the Registrar ; they had forever done with the Council. The reasons were, that after exerting himself as much as he could, and filling the office of Vice-President energetically, he had not succeeded to the office of President, which he looked for as a matter of course. He was told indirectly that the reason of this was that it would be a monstrous thing to be said in the country that a homœopathist was at the head of the medical profession. He was also told by his friends outside that he would never get the other members of the Council to look on him with cordiality. He told them he was always met with courtesy and kindly feelings, and that any prejudice would soon wear off. But when he was told that in four years there had not been one homœopathist who presented himself for examination, he thought this was sufficient argument to go to the country and put an end to the Council, so far as the homœopathists were concerned.

The President said he could not allow it for a moment to go to the country that it was because he (Dr. Campbell) was a homœopathist he was refused the chair. (Members—No, nothing of the kind). He told Dr. Campbell that the reason why he was not chosen President was a personal consideration alone.

Dr. Grant remarked on the sudden resignation of Dr. Campbell. He considered no person should withdraw from the Medical Council on personal grounds, and because he was not elevated to any important position. If any member had the good of the Council at heart, he should still work as one of the body endeavouring to elevate the medical profession in the Province of Ontario. (Hear.) The Legislature, when their Bill was presented, should be made aware of the important fact that Dr. Campbell withdrew from the Council on purely personal grounds, and such withdrawal should receive the consideration of the Legislature. (Hear.)

Some discussion ensued on the conduct of Dr. Campbell towards the Board of Examiners, and which the members present condemned in very severe terms.

The President drew the attention of the members of the Council to the matter of medical men being required to furnish particulars respecting the deaths of persons without any remuneration. He thought the Council should consider the matter.

After a vote of thanks to the Warden for the use of the hall, to the President and members of the press, the Council adjourned *sine die*.

Selected Articles.

OBSTETRICAL SOCIETY OF LONDON.

MEETING, MAY 7TH, 1873.

Case of Extra-Uterine Pregnancy. Gastrotomy successfully performed.

BY W. ROSS JORDAN.

The woman, æt. 29, was a patient in the Birmingham Hospital for Women. In April last she had inflammation of the bowels, which threatened her life. In July or August she first felt the child, and in September she expected and prepared for her confinement. From this time she for six weeks gradually became smaller in size, after which she fancied she was in labour, being in great pain for three or four days. After that she had frequent shivers and a cold sensation in the abdomen. On the 13th December a swelling in the abdomen not larger than in ordinary pregnancy at six months was discovered, fluctuating a little towards the left side, and on deeper examination a round mass like the placenta between the umbilicus and pubis and a harder projection to the upper and left border of the tumor. The cervix uteri was pushed up to the right side. The sound penetrating three and a-half inches pointed to the right groin and moved the round body felt in the abdominal examination. The recto-vaginal pouch was occupied by a hard rounded mass. On December 21st a puncture with the aspirator was decided upon, and a quantity of chocolate-colored fluid mixed with white flakes was drawn. Mr. Ross Jordan, from his examination on this occasion, came to the conclusion that the case was one of extra-uterine foetation. Two hours after, complete collapse came on, and hæmorrhage into the cyst or abdomen was suspected. Five hours after the use of the aspirator, an incision four inches long was made in the abdominal wall down to the peritoneum, when the cyst with the placenta under it presented. A clot of blood having been removed, the cyst, with a foot near the external opening, was drawn forward, but the wall of the cyst being thin, it ruptured, and through this opening the foetus was extracted. The placenta was left undisturbed, and the openings of the cyst and the abdominal wall were brought together by sutures of carbolized catgut, leaving an open wound about two and a-half inches long, which was covered with a layer of tenax, etc. The patient progressed favorably, and on the 1st and 2nd of January large fragments of placenta were discharged, and on the 10th of April she came to the hospital looking well with the wound quite closed.

Note on the Diagnosis of Extra-Uterine Pregnancy.

BY LAWSON TAIT, F.R.C.S.

The author thought that in these cases very little confidence should be placed in the statements of patients if they were not in harmony with physical signs. He had, in consequence of the history of her case given by a patient, been led to make an erroneous diagnosis, mistaking a multilocular ovarian tumor for a case of extra-uterine foetation. There were two circumstances which invariably accompanied extra-uterine gestation that has gone past the period. The first was due to the general excitement and congestion of the organs involved, specially to the enlargement of the uterus, and the second to the absorption of the liquor amnii after the death of the child. The conditions with which extra-uterine pregnancy may be confused before the death of the child, were displacement of the normally pregnant uterus during the early months, pregnancy complicated with fibro-myoma or cystic disease of the uterus, and more rarely pregnancy of one-half of a double uterus. After the death of the child, diagnosis was more difficult, the two points in the history already mentioned were most important, auscultatory signs were of no use. The other conditions with which it might be confused were pelvic hematocoele, ovarian tumors, especially dermoid cysts, cancer, fibro-cystic disease of the uterus, hydatids of the uterus, and phantom pregnancy. The uterus in extra-uterine pregnancy was always intimately associated with the tumor, and generally in front of it moveable to a limited extent and enlarged. The most important point was that the cervix is always patulous. Under such circumstances, if a foetal heart were audible, the case was clear. If the case were seen after the death of the child, the tumor would be soft, and besides obscure ballottement possibly a part of the child might be made out by internal or external examination. Of the three cases which the author had seen, two had been first pregnancies, and in neither had there been any troublesome pain, in the third there was great pain, but the patient was seen during the false labor.

A Case of Gastrotomy for supposed Extra-Uterine Gestation.

BY ALFRED MEADOWS, M.D.

The patient, æt. 58, was admitted to the Hospital for Women, and had passed through the climacteric period nine years ago. She had great pain in the abdomen, which was enlarged by the presence of a tumor. Sixteen years since she fancied herself pregnant, and in due time had pains like those she had felt in her first confinement; these however gradually declined, and no child was born, and since that time she had considered herself to be carrying a dead child. On admission the abdomen was found to be occupied by a large tumor about the size of the uterus at term, tender to the touch,

and apparently solid. The uterus was high up, and its cervix very small; the sound passed upwards and forwards two and a-half inches. The balance of opinion among the author's colleagues being that this was a case of extra-uterine gestation, it was determined to clear up all doubts upon the matter by making an exploratory incision five inches in length between the pubis and umbilicus. A white friable mass was then discovered, having all the characters of malignant disease; it broke down readily, and two ounces of a thick brownish fluid escaped. Finding it impossible to remove the mass, the abdominal wound was closed. Fifty-three hours after the operation the patient died, and, upon opening the abdomen, the mass of malignant disease was found to be in the omentum, which overlapped the tumor and was about an inch in thickness. The tumor itself, which was adherent in every direction, proved to be a large fibro-cystic tumor of the uterus. The author cited this case to show the difficulty of diagnosing abdominal tumors. Even with the aid of an exploratory incision a correct diagnosis of the character of the tumor had not been arrived at previous to death. He believed it to be the moral duty of every one to record his failures as well as his successes.—*Obstetrical Journal*.

ACTION OF THE VAGUS ON THE HEART.

Schiff's old view that the vagus is really the motor, and not the inhibitory, nerve of the heart has lately received some corroboration from some experiments performed by A. Mosso, and recorded in a late number of the Italian journal, *Lo Sperimentale*. Mosso's experiments were peculiar in the circumstance that he employed chemical stimuli to excite the nerve. The animals were dogs, and the cardiac beats were made independent of blood-pressure by the subcutaneous injection of atropine. The vagi and recurrent nerves were excited by the careful application of a drop of caustic solution of potash. The conclusions arrived at by M. Mosso were that the excitation of the *nervi vagi* increases the frequency of the pulse, in consequence of the irritation of the excito-motor fibres running in the trunk of the vagus. If the sheath of the vago-sympathetic nerve be opened, and the sympathetic be separated from the vagus, chemical excitation of the latter constantly produces an increase of the pulse frequency, whilst excitation of the sympathetic is without perceptible effect on the rhythm of the heart. Mechanical irritation of the inferior laryngeal nerves by simple section is sufficient to increase the pulse frequency, and this quite independently of any exaltation of the blood pressure.—*Lancet*.

"CATCHING COLD."

In this changeable climate of ours, hardly a week passes without ourselves or some of our acquaintances catching cold. Our opportunities of studying the pathology of colds are thus only too numerous, and yet we know so little about it, that he must either be a very wise or a very rash man who will undertake to say why exposure to an east wind will give coryza to one man, sore throat to a second, bronchitis to a third, and so on. Almost all that can be stated about the matter with any degree of certainty is, that the diseases just mentioned, as well as a good many others which are all popularly ascribed to cold, are liable to come on after the whole body, or parts of it, such as the feet, have been quickly cooled below the normal, or, in other words, have been chilled. There are always two factors concerned in the cooling either of the body or of its parts. One of these is the nature of the external medium, such as air or water, which is in contact with the body; and the other is the condition of the blood-vessels, by which the warm blood is brought from the interior of the body to the surface, and thus exposed to the influence of cold. Dry air has so little power to abstract heat, that Arctic travellers can go about comfortably without a great coat when the thermometer is standing fifty degrees below zero, provided that the air be still. A very little wind is sufficient to prevent them from doing this, however, for the constant impact of fresh particles of cold air on the surface of the body soon carries off its heat. The presence of moisture in the air greatly increases its power of abstracting heat, and when wind and moisture are combined, the chilling effect reaches its maximum. We may be able to face a cold dry wind without feeling any inconvenience; but if the wind be moist, or, still worse, if our clothes be wet, we shall feel chilled completely through, shiver, and probably catch a severe cold. Heat has been constantly and rapidly abstracted from our bodies, and the blood which brings warmth to the surface has itself been at length cooled. No one is astonished at catching cold under such circumstances, but we are often astonished that we should do so during warm weather, and with hardly any apparent cause. Experience has shown us, in fact, that it is not so much the absolute lowness of temperature which gives rise to colds as sudden changes from a higher to a lower. The reason of this remained unknown till the recent researches of Professor Rosenthal cleared up the mystery. It is well known that when cold is applied to the surface of a healthy animal, the cutaneous vessels contract. They thus prevent the blood from circulating in the skin, and by confining it to the interior of the body, prevent its cooling, and preserve the temperature of the vital organs, unless the application of cold be continued for a considerable time. This is not the case, however, when the animal has been previously exposed to warmth some time before. The cutaneous vessels become para-

lysed by the heat, and remain dilated even after the cold has been applied. The blood is thus exposed over a large surface, and becomes rapidly cooled, even although the temperature of the surrounding medium is not very low. In Rosenthal's experiments, animals were kept for a little while at a temperature from about 97 deg. to 104 deg. Fahr. The temperature of the animals themselves quickly rose during their confinement to 111 deg. or 113 deg. Fahr. After their removal, it not only sank to the normal, but even below it, so that an animal which was from 107.6 deg. to 111 deg. in the warming apparatus fell to 96.8 deg., and remained at that for several days, although the room in which it was kept was moderately warm. Confinement in a choky office, hot theatre, crowded ball-room, will have a similar effect on man, and in the latter case it will be increased by the exercise of dancing. From such places people pass out into the cool open air, or will sometimes even purposely station themselves in a draught. The blood which is coursing not only over the flushed face, but through the dilated vessels of every part of the surface, is rapidly cooled below the normal, and, on its return to the internal organs, cools them much more quickly than it could have done had the person simply been exposed to cold without dilatation of the vessels by previous warmth. Rosenthal lays much stress, and we think rightly, on the great effect of sudden *cooling* in bringing on a cold, the sudden change in the temperature of the blood producing an irritating effect, and inducing inflammation in any weak organ in a way that a gradual alteration would not do. It would seem, however, that the alteration must be from a temperature above to one below the normal temperature of the blood, and not a mere reduction from one considerably above the normal to one at or near it. When much heated, we may stand for a short time in a cool atmosphere with impunity; but if we stand long enough to carry the cooling process too far and produce a shiver, we run a great risk of catching cold. The fact that it is more dangerous to sit for a long than a short time in wet clothes, appears to indicate, that a considerable and more gradual cooling, such as may then occur, will produce similar effects to a slight cooling suddenly effected by exposure to a cold draught after being in a warm room. The effect of a chill in causing inflammations may be partly due to the effect of cold on the tissues themselves, and partly to the hyperæmia which will occur in some parts when the blood is driven out of others by the contraction of their vessels. Rosenthal is inclined to ascribe the chief power to the former of these causes. Everybody knows the beneficial effect of cold baths, cold sponging, etc., in "hardening" persons, as it is termed, so that those who employ them are able to face almost any weather, and to endure sudden changes of temperature without injury; while those who coddle themselves and stop up every crevice lest a breath of air should blow upon them, are constantly suffering from colds. Rosenthal considers that this is due to the frequent

application of cold water or cool air increasing the tone of the cutaneous vessels, so that they do not become so much relaxed by heat as to be unable to contract with sufficient force when necessary. The power of regulating the temperature is thus preserved, and the person prevented from catching cold.—*Brit. Med. Journal.*

THE LADY MEDICAL STUDENTS.

Judgment has proved adverse to the lady students at Edinburgh on their appeal to the Court of Session. The tribunal was a very competent one, and the arguments *pro* and *con.* were reviewed with clearness and impartiality. Three of the judges hold, or have held, high offices in the Universities of Scotland, while seven others have taken an active part in academical administration. Our readers will remember that some three years ago the University Court issued regulations under which ladies might be admitted as medical students. Accordingly Miss Jex Blake and six others matriculated after the usual examination; were enrolled as students; and attended the classes which qualify for the first course. A number of the professors, however, in their professorial capacity, and as members of the Senatus Academicus, declined to teach the ladies any further, or to admit them to graduation. After a good deal of platform and newspaper controversy, the ladies called upon the Chancellor and Senatus to defend their procedure before Lord Ordinary Gifford. His lordship pronounced in favour of the appellants; but his decision has been reversed by the second division, after consulting the other judges. Out of the twelve judges, five were in the appellants' favor—a fact which, it is said, will tempt the ladies to appeal to the House of Lords. It seems difficult, however to get rid of the argument that the original constitution of the university did not contemplate the admission of ladies, either to studentship or to graduation. The remedy open to the ladies is surely a sufficiently obvious one. Let them devote the ample funds they have at their disposal, not to fruitless and vexatious litigation, but to the founding of a college of their own, where they may prosecute their medical studies, and qualify for such practice in the disease of women and children as they may prove fit for. Society will respect them the more, and even recognize their claims as qualified nurses and accoucheuses the sooner, if they retire from a useless and not very feminine contest, and seek the attainment of their ambition by means at once legitimate and easy.—*Lancet.*

The Canada Lancet,

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TORONTO, AUGUST 1, 1873.

THREATENED DISRUPTION OF THE COUNCIL.

At the close of the last meeting of the Council of the College of Physicians and Surgeons of Ontario, the Homœopathists signified their intention of withdrawing from the Council, giving as one of their reasons the fact that Dr. Campbell—who was Vice-President last year—was not appointed President this year; another reason being, that although the Council had been in operation four years, no students of their persuasion had presented themselves for examination. In regard to the latter objection, either of two things must have been the cause, viz., that there is no longer any demand for practitioners of their school of faith, or else their students are averse to the high standard of qualification required by the Council; for even Dr. Campbell will not say that, by any possible means, injustice could have been done them by the examiners at the Board. In reference to the former, we incline strongly to the belief that personal feeling was the chief obstacle in the way of Dr. Campbell's promotion to the presidentship of the Council. We are not aware that the Homœopathists have as yet officially sent in their resignation, and we think it quite probable they will not do so until they have brought their alleged grievances before the Legislature, and have received a favorably reply from that august body. Be this as it may, no one who understands the working of the Act and who has the interest

of the profession at heart, but will regret that such action should be contemplated.

Whatever faults Dr. Campbell—the leader of this body—may have, or whatever of personal feeling he may have aroused against himself and his promotion to the office of President, no one who knows the circumstances will deny that he worked earnestly and faithfully in the interests of the Council and the profession, and we regret to see him now contemplating the pulling down of a structure that he himself has worked so hard to build up, and especially on a pretext so frivolous as the one alleged.

All must admit that the Council have a perfect right to select whom they please to preside over their deliberations. During the greater part of the year just past, Dr. Campbell was acting as President of the Council, owing to the unfortunate illness of the President; and while we have no particular fault to find, we believe that many of his acts, while in that position, were such as to estrange some of his best friends from him. He was also unfortunate enough, while acting as the Chairman of the Board of Examiners, to place himself in direct antagonism to the majority of the members of that Board, and their influence was no doubt used against his candidature for the presidency; so that if Dr. Campbell was not made President of the Council, he has himself in great part to blame. We do not deny that some, both inside and outside the Council, may have felt that it would be inconsistent to have a Homœopathist as President; but the majority of the members of the Council distinctly disclaimed any such feeling. In a mixed body like the present Council, there could have been nothing wrong or inconsistent in selecting the President from either wing of the profession; and were it not for the strong personal feeling that existed, Dr. Campbell would have been selected, and judged by the labors he has done in the interests of the Council, no one was more deserving of the honor.

And now that the Homœopathists, under the leadership of Dr. Campbell, have undertaken to organize for the purpose of upsetting the B^{ill} and establishing a separate Board for themselves, we feel disposed to let them go. We do not mean by this that they are to return to the old licensing board, we never wish to see that revived; but we think that, owing to the different sectional interests, the Council might, without injury, be split up into sections; each section have control of the *final examination* and licensing of its own students.

Come what may, we must insist upon a uniform standard of matriculation for all ; also a uniform curriculum and examination in all branches common to the various schools, on such subjects as anatomy, physiology, chemistry, diagnosis and pathology, medical jurisprudence and toxicology, sanitary science and botany. The students may then be passed to either section, to be dealt with as such body may deem proper. We believe this is the only plan which will give satisfaction ; each section of the profession will then have full control of the final education and registration of its own students ; but the same matriculation and primary examination on the above subjects should be undergone by all, and the latter may be passed at the end of the second year.

There can be no desire on the part of the general profession, even if they had the power to do so, to force any of the sects to continue as they are ; at the same time we hope we may never return to the state of affairs that existed prior to the passing of the Ontario Medical Act. We have just one remark more to make, and that is in reference to the appointment of the examiners for the ensuing year. According to the spirit of the Act, we do not think that the members of the Council should have constituted themselves examiners. The examiners are the servants of the Council, and as such should have been chosen outside of that body. It gives it too much the appearance of a close corporation, and is not calculated to inspire that confidence, which should ever exist between the profession and the Council.

ADULTERATION OF PEPSIN.

This agent, which is so invaluable to the physician in the treatment of many forms of dyspepsia and indigestion, from its expensiveness has been almost beyond the reach of many patients. A cheap article, under the name of Houghton's pepsin, has been in the market for several years, and has no doubt been used pretty extensively in many parts of the country. The genuineness of this preparation has been suspected for some time past, although no one has gone to the trouble of making a careful analysis of it. It has been remarked by many, that it possessed a very bitter taste, and did not seem to have any decided effect in aiding the digestive process, further than that

produced by any ordinary tonic. This led Mr. A. E. Ebert, of Chicago, to make an analysis of a sample of the article ; and although he did not succeed in proving its presence, he expressed his firm opinion at the meeting of the American Pharmaceutical Association at Baltimore, that the bitterness was due to strychnine. Since then, R. Rother, in the *Chicago Pharmacist*, describes the method adopted by him for testing its presence. He says if the bichromate of potash and sulphuric acid test, which is so extremely delicate for pure strychnine, is applied to a mixture of strychnine containing sugar, the reaction is prevented or obscured by the reduction of the chromic acid to the state of a sesquioxide. But if the mixture contains uncombined strychnine, chloroform will extract it,—though not if it exists in the condition of a salt. The suspected pepsin is therefore treated with a few drops of ammonia, and then with chloroform, filtered and evaporated, and the residue tested with sulphuric acid and bichromate of potash, when the beautiful violet color, characteristic of this test, is produced. Owing to the ready adulteration of this medicinal agent, great care is necessary in its selection, and it has been recommended that pharmacutists should, when practicable, prepare it themselves. By the process given by Mr. Scheffer, of Louisville, Ky., it may be easily and expeditiously obtained, and at a very moderate price. This consists in precipitating it from its acidulated aqueous solution by saturation with chloride of sodium.

The stomachs of pigs are the best sources of pepsin, the yield from which is said to be enormous if the proper means are employed to secure it. The stomachs should be quite fresh and well cleaned. They are then cut into thin shreds by means of scissors, macerated for two days in a large volume of acidulated water, of the strength of half an ounce of muriatic acid to one gallon of water. This quantity is sufficient for one stomach. The acid liquid is then poured off and the stomachs are again macerated for two days longer, with a similar quantity of acidulated water ; and this operation may be repeated three or four times with profit. The liquid obtained from the several macerations is treated with about one-fourth its weight of chloride of sodium, and the precipitated pepsin, which accumulates in flakes on the surface of the liquid, is skimmed off, strained, and pressed. The moist pepsin is then mixed with a weighed quantity of milk sugar, and dried. It is then weighed, and enough milk sugar added to make the final weight of the mixture

equal to ten times the weight of the real pepsin. Cold weather is the most suitable time for manufacturing pepsin, as the stomachs will remain fresh a much longer time than in warm weather. The yield of pepsin from six stomachs is about four ounces, and when the milk sugar is added it will make about forty ounces. Thus it will be seen that the outlay incurred is very little, and the remuneration, aside from the fact of having a genuine article, is sufficient to reward the labours of the chemist abundantly.

Several attempts have been made to procure liquid pepsin in a concentrated form, having the same strength as the saccharated. For this purpose the moist pepsin is dried and then mixed with sufficient muriatic acid and glycerine to make the liquid weigh ten times as much as the original pepsin; but the results were not satisfactory. The acid and glycerine were added to the pepsin without drying, and the strength proportioned as before as nearly as possible, but it was found that neither of the above would dissolve albumen, the ordinary test of the value of pepsin, and the mixture did not form a clear solution. It was found, however, that if the liquid was increased to forty times the weight of the pepsin, a perfect solution could be obtained possessing the active properties of pepsin; but was only one-fourth the strength of the saccharated powder.

The interesting and important investigations of Mr. Scheffer will develop a new era in the manufacturing interest of pepsin, and sweep from the market all base and worthless imitations, both by virtue of the genuineness and cheapness of the article produced. We particularly recommend this subject to the attention of our pharmaceutical friends.

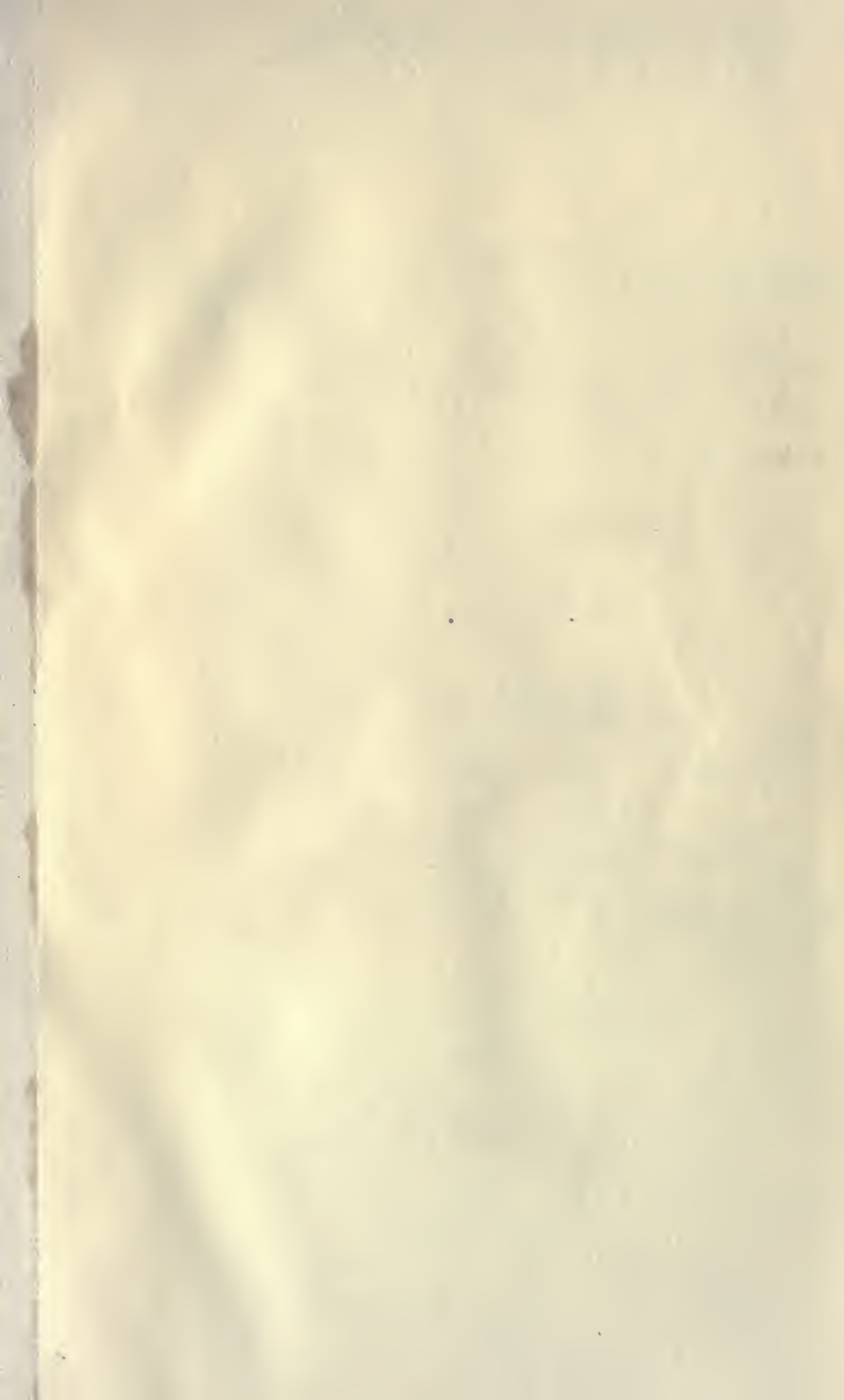
THE APPROACH OF CHOLERA.

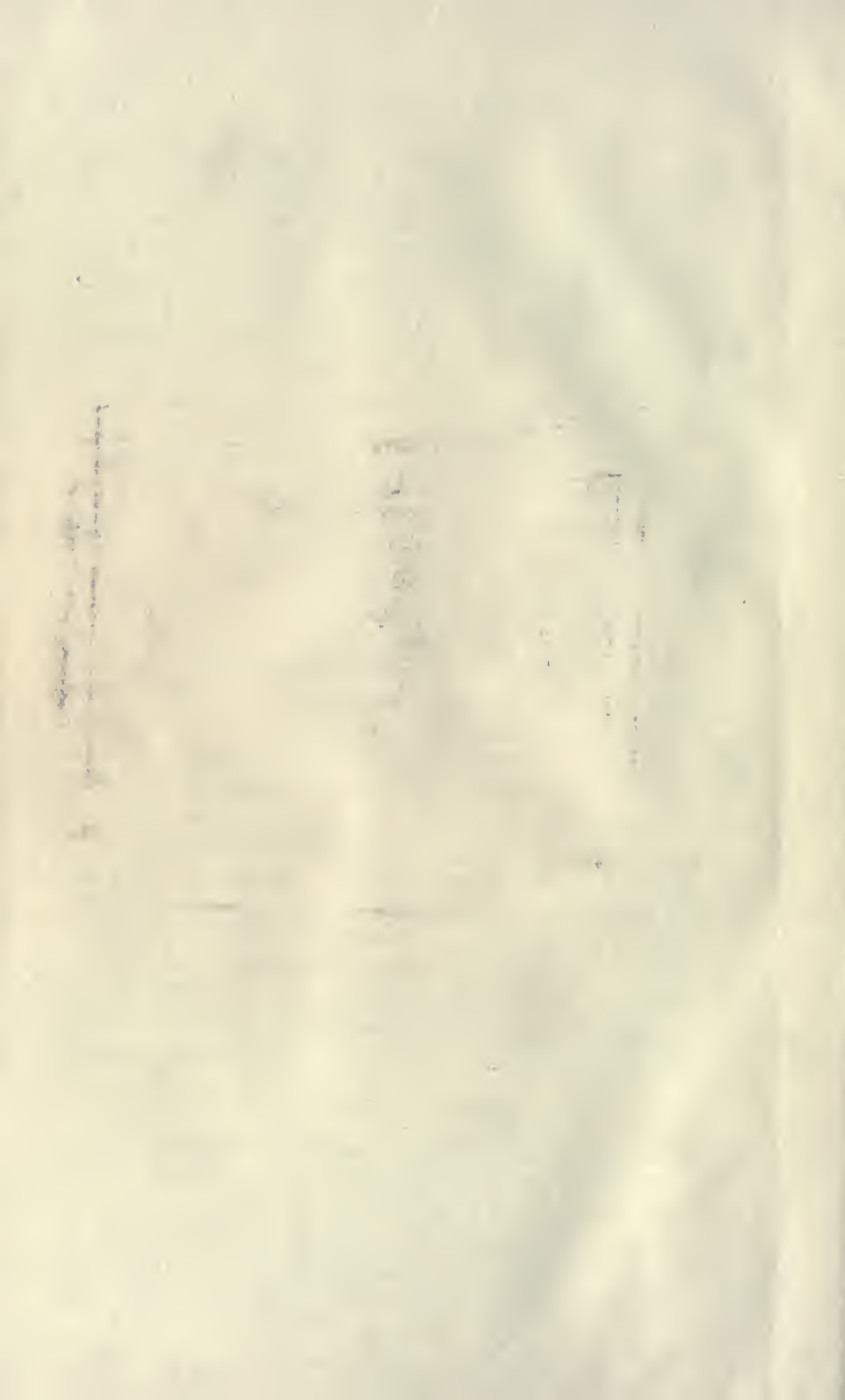
Notwithstanding the uneasiness which has been felt in view of the probable approach of cholera, very little actual preparation, by way of cleaning the lanes and streets of our cities, has been done by the authorities to ward off the disease. Several cases have been reported in some of the cities of the Southern States of America, but no detailed statements of its ravages have reached us. It is also quite probable that many of the so-called cholera cases were nothing more than aggravated cases of diarrhoea in debilitated or

intemperate patients. The disease has shown itself in some of the cities of continental Europe, but it does not appear to travel with its usual rapidity,—a few cases have occurred at Dantzic, Vienna, and in the north-western part of Italy. In the latter place, twenty-four cases are reported, of which about half the number died. The Italian Government has adopted the most energetic measures to prevent its spread. On the whole, the disease has not shown signs of wide migration anywhere in Europe; but it is nevertheless the duty of the authorities to be watchful and prepared. The adoption of the most approved precautions against its attack is the bounden duty not only of the public, but also of each individual.

Cholera is not generally looked upon by the profession as a very contagious malady,—so that under reasonable care it is not likely to attack even those who act as nurses or are in close attendance on the sick. Prompt disinfection, and the neutralization or destruction of all matters which contain any of the discharges of choleraic patients, are imperatively necessary. The water supply should be carefully examined wherever the slightest suspicion as to its purity exists. House refuse and other filth which may have accumulated about the premises should either be removed at once or thoroughly disinfected; the rooms whitewashed with fresh lime; all foul and rotten drains, especially those near or beneath the premises, should be attended to; and the soil beneath basement floors examined, and, if necessary, thoroughly disinfected by means of lime or a layer of charcoal. Regularity of diet and rest, temperance in eating and drinking, are among the most important precautions, and should be strongly inculcated. All these precautions may be unnecessary so far as cholera is concerned, and we sincerely hope they may; but the good effects of such a *regime* cannot fail to be of invaluable service in anticipating and arresting the spread of other epidemics many of which are nearly as fearful in their ravages as cholera.

APPOINTMENT OF EXAMINERS.—The following gentlemen have been appointed examiners in medicine by the Senate of Toronto University:—Physiology and Comparative Anatomy, G. Wright, M. B.; Surgery and Anatomy, J. E. Graham, M.D.; Medicine and Therapeutics, J. W. McLaughlin, M. B.; Midwifery and Medical Jurisprudence, T. White, M.D.; Chemistry, W. H. Ellis, M.A., M.D.





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